

1.ŠT—v

ComWin ,í Windows ŠÂ«« ,ÉŒ†, ,Ä,ç,é,ÆŽv,í,ê,é
fLfff%ofNf^ ŽwŒü,ìfvfFf<fvf[]fOf%of€ ,Å, ·□B
f}fEfX'€[]i,É,,ç,x,Ä□AfL[]f{[]fh'€[]i,íŽæ,è•t,« ,É,,ç,à,ì,Å,·,ª□A
Œø—! "I,ÉfjfXf^f}fCfY,³,ê,½ŠÂ«« ,Å,í□A
fL[]f{[]fh,í□Å' ¬,ìfifyfŒ[]fVf†f" ,đ'ň<Ÿ,μ,Ü, ·□B

ComWin ,í□AŒ© ,½-Ú,í DOS fvf[]f"fvfg,ÉŽ— ,Ä,ç,Ü,·,ª□A
□š-ň,ì'½,ç DOS fvf[]f"fvfg,Æ^á,ç□AWindows fvf[]fOf%of€ ,Å, ,è□A
Windows ,ì—l□X,ÈfT[]fRfX,đ—~ —p,μ,Ä□A
ŠÂ«« ,ìŒü□ä,ì,½,β,ÉŽŸ,ì,æ,α,È<@ "\,đ'ň<Ÿ,μ,Ü, ·□B

- (1) DOS□AUNIXf%ofCfN,È"à•"fRf}f"fh,ìŽg—p
- (2) Windows fvf[]fOf%of€,ìf[][]f []L,Æ,μ,ÄŽg—p
- (3) fAfvfŠfP[]fVf†f" ,Æ,ìŠÖ~A•t<N" ®□AfGfCfŠfAfX<@"\,Å<N" ®'€[]i,đ'Z□k
- (4) f}f<f' fXfe[]fGf[]f"fg□Afofbf' ftf@fCf<,É,æ,é<N" ®□^—□,ìfofbf`%oo»
- (5) f%ofCf"fgfffBfbfg□AqfXfgfŠ<@"\□Aftf@fCf<-¼•âŠ®<@"\
- (6) ftf@fCf%oo[]fVf[]f"fvfg<@"\,Å%ođ"K,Èftf@fCf<'€[]i
- (7) fhf%ofbfO□•fhf[]fbfvfT[]fo[]<@"\□A'l'đ•¶Žš—ň<N" ®<@"\
- (8) ftf@f"fnfVf†f" fL[]f%of"f' ff[]<@"\
- (9) ftfHf"fg□A" wŒi[]F,đ□Ý'è□A3-Df_fCfAf[]fO□Afc[]f<fo[]L,ìŽg—p
- (10) fL[][Š,,è"- ,Ä,ì•i□X,ª%oÅ"\
- (11) %oβ<Ž,ì□o—í,đŽQ□Æ,Å,« ,é
- (12) Windows,ìshell,Æ,μ,ÄŽg,α
- (13) fXf^[]fGfAfbfv<@"\□A<N" ® ŽžfìfvfVf†f" ,ÅŠÂ««□®"ö
- (14) fŠf_fCfŒfNfg□AfpfCfv<@"\,Å□ "î,ÈfefLfXfg□^—□
- (15) 'È□Mf[]fG,É'î%ož,μ□Af}f<f' ft[]fU[]□AfŠf,[]fGfAfNfZfX,ª%oÅ"\
- (16) ŠÂ««•i□"fT[]fo[]<@"\
- (17) fEfCf<fX,ìŽ©ŒÈ[]f'f<@"\

,» ,ì'¼□, "x,È<@ "\,Æ,μ,ÄŽŸ,ì,æ,α,È,à,ì,ª ,è,Ü, ·□B

- (1) ComWin ,ì API ,đŽg—p,μ,ÄfLfff%ofNf^ ŒenfRf}f"fh,đŠg'£,Å,« ,é
- (2) fRf}f"fhŽÀ□s"•ª,đŠg'£%oü—Ç,Å,« ,é
- (3) ft[]fU[]fCf"f^[]ftfF[]fX,ì'uŠ,ª%oÅ"\
- (4) DOSfRf}f"fh,đComWin'<,ÅŽÀ□s%oÅ"\
- (5) ANSIfGfXfP[]fVfV[]fPf" fX,ªŽg—p%oÅ"\

(6) cshf%oofCfN,È□\‘ç%o»fXfNfŠfvg

(7) Unicode‘î%ožRf“f□[f<

2. "••ftf@fCf<^è—

ComWin, ðŽg—p, ·, é, ½, ß, É, Í □ A

comwinx.exe, comwld.exe, comwld.pif, vcomwd.386,

comwin.dll, comwin.hlp, comwins.dll, comwint.dll,

comwreg.exe

, ðŠeŽ ©, Ì Windows fffBfĀfNfgfŠ, © □ A Windows, ÌfvfXfef€fffBfĀfNfgfŠ, © □ A

fpfX, Å □ Ý ' è, ³, ê, ½ fffBfĀfNfgfŠ, Ì, ç, , , ê, ©, ÉfRfs □ [, μ, Ä, , ¾, ³, ç □ B

comwinx.exe (ComWin '[--f, fWf... □ [f<(•K □ {))

comwld.exe (DOSfRf}f“fh—pf □ □ [f_ □ [(•K □ {))

comwld.pif (DOSfRf}f“fh—pPIFftf@fCf<(•K □ {))

vcomwd.386 (DOSfRf}f“fh—p%o¼'zfffofCfXfhf%ofCfo(•K □ {))

comwinx.pif (DOSfRf}f“fh—pPIFftf@fCf<(Ver. 2.40 ĀÉÝŠ·))

comwin.dll (ComWin 't □ •DLL(•K □ {))

comwin.hlp (fIf“f%ofCf“fwf<fvftf@fCf<(•K □ {))

comwins.dll (•W □ €fRf}f“fh, ð'ñ<Ÿ, ·, éDLL(•K □ {))

comwint.dll ('É □ M<@“\, ð'ñ<Ÿ, ·, éDLL(•K □ {))

comwreg.exe (ft □ [fU □ [“o~^—pf, fWf... □ [f<(•K □ {))

comwin32.dll (ComWin32—pfAf_fvf^)

bhole.exe (32bitfSf~” fuf%ofbfNfz □ [f<)

comwin.ini (□ Ì Ž Ò, Ì Š Å <<, Å, Ì iniftf@fCf<)

comwin.h (ComWinfAfvfŠ—pfwfbf_ □ [—á)

comwin.lib (comwin.dll—pfCf“f □ [fgf%ofCfuf%ofŠ □ A (“ñ“~••))

comwin32.lib (comwin32.dll—pfCf“f □ [fgf%ofCfuf%ofŠ)

readme.txt (fhfLf..f □ [“fgftf@fCf<)

install.bat (ŠÈ'P, ÈfCf“fXfg □ [f%o)

hello.c (K&R, ÉĀh^Ó, ð•\, · □ Å □ %o, Ìfvf □ [fOf%of€)

hello.def (hello.c, Ì'è<`ftf@fCf<)

hello.exe (hello.c, Ì Ž À □ sf, fWf... □ [f<(ComWin•K—v))

hello.cpp (MFC—p, Ì hello)

sample1.c (MakeArgument, Gets, Fputs, Ì Ž g—p—á)

sample1.def (sample1.c, Ì'è<`ftf@fCf<)

sample1.exe (sample1.c, Ì Ž À □ sf, fWf... □ [f<(ComWin•K—v))

sample2.c (Windowsfvf □ [fOf%of€, ©, ç, Ìf □ [fbfZ □ [fW □ o—Í—á)

sample2.def (sample2.c, l'è`ftf@fCf<)
sample2.exe (sample2.c, l'ŽÀ[]sf,fWf...[]f<(ComWin•K—v))
sample3.c (Šg'£fRf}f“fh,đ'ň<Ÿ,·,éDLL—á)
sample3.def (sample3.c, l'è`ftf@fCf<)
sample3.dll (sample3.c, l'DLL(ComWin•K—v))
sample4a.bat (ComWin—pfofbf`ftf@fCf<,lfTf“fvf<)
sample4b.cws (ComWin—pfofbf`ftf@fCf<,lfTf“fvf<)
sample5.c ('[--f\ftfg, l[]i[]—á)
sampel5.def (sample5.c ,l'è`ftf@fCf<)
sample5.exe (sample5.c ,l'ŽÀ[]sf,fWf...[]f<(ComWin•K—v))
makefile (fTf“fvf<,đf[][]fN,·,é,½,β, lmakefile—á)

3. "®if,lfh

ComWin,í,Q,Â,ì"®if,lfh,ď"ö,!,Ä,ç,Ü,·B

(1) fRf}f"fhf%ofCf"f,lfh

DOS fvf"fvfg,Æ"~—l,ÉfRf}f"fh,ď^ê[s"ü—í,·,é,±,Æ,ÅA

Windowsfvf"Of%of€ADOSfvf"Of%of€AWin32sfvf"Of%of€A

ComWin,ì'ň<Ÿ,·,é"à"·fRf}f"fhAfobf`ftf@fCf<,ďŽÀ[s,μ,Ü,·B

f%ofCf"fGfffBfbfgAfqfXfgfŠ[Aftf@fCf<-¼•âŠ®<@"\,ª, ,è,Ü,·B

fGfXfP[fvfV[fPf"fX,ď%oďŽB,·,é,ì,Å

PF,ì•ïXAfj[f\f^Ê'u•ïX,à[s,!,Ü,·B

(2) frf...lf lf,lfh

%oB<Ž,ìo—ÍCE<%oÊ,ďfXfNf[f<fo[,ď—p,ç,ÄŽQÆ,·,é,±,Æ,ª,Å,«,Ü,·B

%oB<Ž,ìo—ÍCE<%oÊ,ď500[s,Ü,Å<L%o~,μA

ftf@fCf<•Û'¶,âfNfŠfbfvf{lfh"']'—,ª,Å,«,Ü,·B

@@@@@"'đ,μ,½•¶Žš—ň,ďŽÀ[s,μ,½,èAfhf"fbfvftf@fCf<%o»,Å,«,Ü,·B

,±,ìf,lfh,Å,ífjif...[fo[,ªoCE»,μAftfHf"fgAF,È,Ç,ď

ŠeŽ©,ìD,Ý,ì,à,ì,É•ïX,·,é@"\,ď'ň<Ÿ,μ,Ü,·B

f,lfh∅,è'Ö,!,í[ESC]fL[,ď%oŸ,·,©AfVfXfef€fjif...[,ì

[menu Bar],É,æ,Á,Ä∅,è'Ö,!,é,±,Æ,ª,Å,«,Ü,·B

ŽQÆ

fRf}f"fhfŠftf@fCf"fX

fjif...[fŠftf@fCf"fX

4. ^ê"Ê"l,ÈŽg—p•û-@

ComWin,đ<N"® , ,é,ÆDOS fvf[]f"fvfg,ÉŽ—,½%œ-Ê,^a, ,ç,í,ê,Ü,·[]B
 ,Æ,è, ,! , []Adir ,Æ"ü-Í,μ,Ä,,¾,¾,ç[]B,Â,¬,É[]Awinmine,Æ"ü-Í,μ,Ä,,¾,¾,ç[]B
 ,Ü,½[]AESCFL[],đ2x3%ň%ÿ,μ,Ä,Ý,Ä,,¾,¾,ç[]B
 ^ê"Ê"l,ÈŽg—p•û-@,[]fCf[][]fW,^a,Â,© ,ß,é,ÆŽv,ç,Ü,·[]B

- (1) DOS[]AUNIXf%ofCfN,È"à•"fRf}f"fh,ìŽg—p
- (2) Windows fvf[]fOf%of€,ìf[][]f [][,Æ,μ,ÄŽg—p
- (3) fAfVfŠfP[][]fVf+f",Æ,ìŠÖ~A•t<N"® []AfGfCfŠfAfX<@"\,Â<N"®'€[]ì,đ'Z[]k
- (4) f}f<f`fXfe[][]fgf[]f"fg[]Afofbf`ftf@fCf<,É,æ,é<N"®[]^—[],ìfofbf`%o»
- (5) f%ofCf"fGfffBfbfg[]AfqfXfgfŠ<@"\[]Aftf@fCf<-¼•âŠ®<@"\
- (6) ftf@fCf%o[][]fVf[]f"fvfg<@"\,Â%ođ"K,Èftf@fCf<'€[]ì
- (7) fhf%ofbfO[]•fhf[]fbfvfT[][]fo[][]<@"\[]A'ì'đ•¶Žš—ň<N"®<@"\
- (8) ftf@f"fNfVf+f"fl[][]f%of"f`ff[][]<@"\
- (9) ftfHf"fG[]A"wÆi[]F,đ[]Ý'è[]A3-Df_fCfAf[]fO[]Afc[][]f<fo[][,ìŽg—p
- (10) fl[][]Š,,è"—,Ä,ì•ì[]X,^a%oÂ"\
- (11) %oß<Ž,ì[]o—Í,đŽQ[]Æ,Â,«,é
- (12) Windows,ìshell,Æ,μ,ÄŽg,α
- (13) fXf^[][]fgfAfbfv<@"\[]A<N"® Žžf[]fVf+f",ÂŠÂ<<[]®"ö
- (14) fŠf_fCfÆfNfg[]AfpfCfv<@"\,Â[] "î,ÈfefLfXfg[]^—[]
- (15) 'Ê[]Mf[][]fg,É'í%ož,μ[]Af}f<f`ft[][]fU[][]AfŠf,[][]fgfAfNfZfX,^a%oÂ"\
- (16) ŠÂ<<•ì"ft[][]fo[][]<@"\
- (17) fEfCf<fX,ìŽ©ÆÈ[]f'f<@"\

- (1) DOS[]AUNIXf%ofCfN,È"à•"fRf}f"fh,ìŽg—p
DOSf%ofCfN,È"à•"fRf}f"fh
ftf[][]fg
cls, cd, exit, for, md,
rd, rem, set, type, ver,
a:(fhf%ofCfu•ì[]X)
<@"\,É[]\$ÆÀ,^a, ,é,^afTf[][]fg
copy, cttty, date, del, dir,

mode, path, pause, prompt, ren,
time, vol

UNIXf%ofCfN,È“à•”fRf}f“fh

<@”\,É□\$CEÀ,ª, ,é,ªfTf|□[fg
alias, dirs, echo, fg, kill,
history, popd, ps, pushd, pwd,
test, unalias

Win95f%ofCfN,È“à•”fRf}f“fh

<@”\,É□\$CEÀ,ª, ,é,ªfTf|□[fg
start

“ÆŽ©fTf|□[fg,lfRf}f“fh

clip, paste

fXfNfŠfvfgCEn,lfRf}f“fh

break, breaksw, call, continue, else,
end, endif, goto, if, return,
shift, switch, then, until, while

“Á•Ê,É□Ý, ¯,Ä,ç,éfRf}f“fh

help fTf|□[fgfRf}f“fh,lfŠfXfg,đ•\Ž!,·,é□B
let f□□[fj]f<ŠÂ<<•ï□”,đ‘€□ì,·,é□B
printf □‘Ž®•t,«□o—lfRf}f“fh
term ‘Ê□M’[---<@”\,đ’ñ<Ÿ,·,é□B

Windows API CEn,lfRf}f“fh

KeyboardLayout Keyboard Layout, IME ,đ•ï□X,·,é□B
PostMessage ’¼□Ú PostMessage API ,đCEÄ,Ô□B
SendMessage ’¼□Ú SendMessage API ,đCEÄ,Ô□B
SetWindowPos ’¼□Ú SetWindowPos API ,đCEÄ,Ô□B
SetWindowText ’¼□Ú SetWindowText API ,đCEÄ,Ô□B
ShellExecute ’¼□Ú ShellExecute API ,đCEÄ,Ô□B
win ’¼□Ú WinExec, LoadModule API ,đCEÄ,Ô□B
reboot, restart MS-DOS, Windows ,đ□Ä<N“®,·,é□B

shutdown Windows ,đ□l—^{1,3,1},é□B
logoff Windows 95,NT ,©,çf□fOfift,·,é□B(32frfbfg"Å,ì,Ý)

ŠefRf}f"fh,ìfpf%of□□[f^□[,É /? ,đŽw'è,·,é,Æ
ŠÈ'P,Èfwf<fv,ª•\Ž!,³,ê,Ü,·□B

(2) Windowsfvf□fOf%of€ ,ìf□□[f_ ,Æ,μ,Ä—~—p
—á
>progman
>taskman
>notepad setup.txt

DOSfvf□fOf%of€ ,à comwld.exe,comwld.pif,vcomwd.386
,ì<@"\,đ—~—p,μ,ÄDOSf{fbfNfX"à,Å<N"® ,μ,Ü,·□B
Win32sfvf□fOf%of€ ,àŽ© "®"»•Ê,μ,Ä<N"® ,μ,Ü,·□B

32bit"Å
<ó" ,đŠÜ ,pftf@fCf<-¹/₄ ,à ^ø—p•,(") ,ÅŠ‡,é,± ,Æ,ÅŽÀ□s%oÅ"\,Å,·□B
,¹/₂,³/₄ ,μ□AŠO•"fRf}f"fh,ÉCEÀ,è,Ü,·□B

'□^Ó
comwld.pif ,íŠeŽ© ,ìŠÀ<< ,É , ,í,¹ ,Ä□Å"K%o» ,đŽŽ,Ý,Ä, ,³/₄,³ ,ç□B
(comwld.pif ,í 386SX fNf%ofX—p ,ìf^fCf€fXf%ofCfX'l ,đŽw'è,μ,Ä,ç
,Ü,·,ì,Å□A
"®□ì,ÉŽx□á,ª , ,é□ê□‡,í dosprmt.pif 'ö"x,ìf^fCf€fXf%ofCfX'l,đ
Žw'è,μ,Ä, ,³/₄,³ ,ç□BDOS/Vft□[fU□[,ì•û,í□A
ftfHf"fg□AÇ³/₄Çêf,□[fh,à□Å"K%o» ,μ,Ä, ,³/₄,³ ,ç□B)
DOS,ì"à•"fRf}f"fh,đŽg—p,·,é□ê□‡,í□A
c:\>command /c type autoexec.bat
c:\>command.com /c type autoexec.bat
,ì,æ,α,ÉŽg—p,μ,Ä, ,³/₄,³ ,ç□B

ŽQ□Æ
fRf}f"fh,ì—D□æ□‡^Ê

(3) fAfvfŠfP[fVf#f" ,Æ,ìŠÖ~A•t<N" ® AfGfCfŠfAfX<@"\,Å<N" ® '€ì,ð'Zk

fAfvfŠfP[fVf#f" ,Æ,ìŠÖ~A•t<N" ®

ftf@fCf<f}fì[fWff,ìufAfvfŠfP[fVf#f" ,Æ,ìŠÖ~A•t, <@"\v,â
"o~^ff[f^fx[fX reg.dat ,ÅŠÖ~A•t, ,ç,ê,½Šg'£Žq,ð,à,Åftf@fCf<,íA
ftf@fCf<-¼,ð"ü—í,·,é,¾, ,ÅfAfvfŠfP[fVf#f" ,ð<N" ® ,μ,Û,·B

—á

c:\windows>readme.wri
f%ofCfG,ð<N" ® ,μAreadme.wri ,ðŠJ,«,Û,·B

(' ^Ó) fAfvfŠfP[fVf#f" ,ìŠÖ~A•t, ,í win.ini [Extensions] ,Å
Žw'è,³,ê,Ä,ç,é,à,ì,ªAreg.dat ,ÅŠÖ~A•t, ,³,ê,Ä,ç,é,à,ì,É—Dæ,μ,Û,·B

fGfCfŠfAfX<@"\,Å<N" ® '€ì,ð'Zk

fGfCfŠfAfX<@"\,ðŽg—p,·,é,±,Æ,ÅfAfvfŠfP[fVf#f" ,ì<N" ® '€ì,ð
'â·,É'Zk,Å,«,Û,·Balias, unalias fRf}f"fh,ð— —p,μ,Ä,,¾,¾,çB

—á

c:\>alias word c:\word5\winword
word ,Æ,ç,ª•¶Žš—ñ,Å winword ,ð<N" ® ,Å,«,Û,·B
c:\>alias man "write c:\windows\readme.wri"
man ,Æ"ü—í,·,é,¾, ,Å readme.wri ,ð\Ž!,Å,«,Û,·B
c:\>alias ls "dir %1 /w"
ls *.c ,ª dir *.c /w ,Æ"WSJ,³,ê,Û,·B

ftfHf<f_[]<N" ®

fRf}f"fhf%ofCf" ,ÉfffBfÇfNfgfŠ-¼,ð"ü—í,·,é,¾, ,ÅA
,» ,ìfffBfÇfNfgfŠ,ªftfHf<f_[] ,Æ,μ,Ä<N" ® ,μ,Û,·B

fffBfÇfNfgfŠ•ïX

fRf}f"fhf%ofCf" ,ÉfffBfÇfNfgfŠ-¼,ð"ü—í,·,é,¾, ,ÅA
,» ,ìfffBfÇfNfgfŠ,É^Ú" ® ,Å,«,Û,·B

```
fVfFf<f%ofbfp[]
```

```
csh ,Å,““éõö,Ý,ìu#![]v,ªŽg—p%oÅ“\,Å,·[]B
```

```
—á,!,î[]A^È%o°,ìsed ,ìfXfNfŠfvfjgftf@fCf<,ì[]æ“ª,É
```

```
#! sed -f
```

```
,Æ,ç,æ^ê[]s,ª, ,ê,î[]A[]used -f tolower.sed[]v,Æ“WŠj,ª,ê,Ü,·[]B
```

```
,µ,½,ª,Á,Ä[]A[]used -f tolower.sed foo.txt[]v,Í
```

```
[]utolower.sed foo.txt[]v,Å’ã—p,Å,«,Ü,·[]B
```

```
c:\>type tolower.sed
```

```
#! sed -f
```

```
y/ABCDEFGHIJKLMNopqrstuvwxyz/abcdefghijklmnopqrstuvwxyZ/
```

```
c:\>tolower.sed tolower.sed
```

```
#! sed -f
```

```
y/abcdefghijklmnopqrstuvwxyZ/abcdefghijklmnopqrstuvwxyZ/
```

(4) f}f<f`fXfe[]fjgf[]f“fg[]Afofbf`ftf@fCf<,É,æ,é<N“®[]^—[],ìfofbf`%o»

```
f}f<f`fXfe[]fjgf[]f“fg
```

```
fRf}f“fhf%ofCf“ ,Éf}f<f`fXfe[]fjgf[]f“fg,ì<L[]q,ª,Å,«,Ü,·[]B
```

```
ŠefRf}f“fh,ð[]u ;[]v,Å<æ[]Ø,Á,Ä,,¾,ª,ç[]B
```

```
('; ,)‘O,É<ó”’ ,ª•K—v,Å,·[]B)
```

```
—á
```

```
c:\>cd c:\bmpdata ;pbrush
```

```
fjyCf“fgfuf%ofV,ì[]ì<ÆfffBfÆfNfgfŠ,ª c:\bmpdata ,É,È,è,Ü,·[]B
```

```
,Ü,½ alias fRf}f“fh,Æ•¹—p,·,é,Æ•Ö—~ ,Å,·[]B
```

```
—á
```

```
c:\>alias jxw "cd c:\jslib ;c:\tarowin\jxw"
```

```
c:\>jxw
```

```
JXW ŠÖ~A,ìfffBfÆfNfgfŠ,ÉPATH,ª[]Ý’è,ª,ê,Ä,ç,È,-
```

```
,Ä,à<N“® ,Å,«,Ü,·[]B
```

```
c:\>alias gv "pushd c:\bmpdata ;c:\gv\gv ;popd"
```

```
c:\>gv
```

```
ComWin %œ-Ê,lfjffŒf“fgfffBfŒfNfgfŠ,đ•ïX,¹,„,ÉA  
gv ,đ“KØ,Èi<ÆfffBfŒfNfgfŠ,Å<N“® ,Å,« ,Ü,·B
```

```
fobf`ftf@fCf<(.bat .cws)
```

```
ComWin ,íA'Êí,lfobf`ftf@fCf<,ì^ê[s-Ú,É "REM BAT FOR COMWIN" ,Æ  
<Lq,³,ê,Ä,ç,éobf`ftf@fCf<,đ ComWin —p,lfobf`ftf@fCf<,Æ,µ,Ä  
^—,µ,Ü,·B$ŒäfR[fh('#', '^') ,ìµ,ç,đ•Ê,É,·,ê,íA  
MS-DOS 5.XX Š®‘Sã^ÊŒÝŠ,ì•¶-@,đ,à,¿,Ü,·B  
(fobf`^—,í Break(Ctrl+Pause)ASTOP ,Å'âŽ~,µ,Ü,·B)  
fGfCfŠfAfX<@"\,ÅŽw'è,Å,« ,È,ç,æ,æ,È'·,³,đŽ,Åfobf`^—,í  
fobf`ftf@fCf<,Å<Lq,·,é,Æ•Ö—~,Å,·B  
%0,%1,%2, ... %9 “™ ,ì^ø”,đŽg—p,Å,« ,Ü,·B  
%PATH% ,ì,æ,æ,ÉŠÅ<«•í”,đ%,ÅŠ‡,é,ÆŠÅ<«•í”,ŽQÆ,Å,« ,Ü,·B  
call, goto, if, shift, ,Žg—p%œÅ“\,Å,·B  
s“ª,ì '@' •¶Žš,í-³Ž<,³,ê,Ü,·B
```

```
if ,ìŽg—p-@
```

```
if [not] exist filename command
```

```
if [not] "string1" == "string2" command
```

```
—á
```

```
c:\>type word.bat
```

```
REM BAT FOR COMWIN <---- ,±,ê,đ^ê[s-Ú,É<Lq,·,é,¾,¯ ,Å,·B
```

```
rem WORD ,ì<N“®—á
```

```
echo WORD ,đ<N“® ,µ,Ü,·B
```

```
pushd c:\word5\sample
```

```
c:\word5\winword %1
```

```
popd
```

```
c:\>word readme.doc
```

```
<N“®ŽžflfvfVf‡f“,Æfobf`ftf@fCf<,đ'g,Ý¶,í,¹,é,±,Æ,É,æ,è
```

```
ComWin ,đxfNfŠfVfGf“fWf“,Æ,µ,Ä—~—p,·,é,±,Æ,ª%œÅ“\,É,È,è,Ü,·B
```

```
—á
```

```
c:\>type script.bat
```

```
REM BAT FOR COMWIN
```

```
echo off
notepad test.c ;fg
cl test.c ;fg
test
exit /p
c:\>comwinx /c script.bat
```

ŽQÆ fXfNfŠfvfgfŠftf@fCf“fX

fVf#[]fGfJfbfgftf@fCf<(.lnk)

```
Windows95 ,Å<N“ @î•ñ,đ[]W,ß,½ .lnk Šg'£Žq,đ,à,Âftf@fCf<,đ
fVf#[]fGfJfbfgftf@fCf<,Æ,č,č,Ü,·[]B
fRf}f“fhf%ofCf“, ©,ç'¼[]Ú[]AfVf#[]fGfJfbfgftf@fCf<-¼,đ
“ü—í,·,é,¾,¯,ÅŠY“ -,·,éfvf[]fOf%of€,ª<N“ @,μ,Ü,·[]B
```

(5) f%ofCf“fGfffBfbfg[]AfqfXfgfŠ<@“\[]Aftf@fCf<-¼•âŠ®<@“\

f%ofCf“fGfffBfbfg[]AfqfXfgfŠ<@“\

```
fj[]f[]f<fL[][,đ'€[]i,·,é,±,Æ,Å'ÅCE®[]”,đCE,ç,¹,Ü,·[]B
(fqfXfgfŠ[]s,í20[]s,Ü,Å)
```

```
ŠÅ<«[]Ý'èf_fCfAf[]fO,lfqfXfgfŠ•âŠ®<@“\,đ—LCEø,É,·,é,±,Æ,Å[]A
CE»[]Ý,lfqfXfgfŠ,Æ^è'v,·,é•¶Žš—ñ,đ%oß<Ž,ì—š—đ,©,ç•âŠ®,μ,Ä
•\Ž!,μ,Ü,·[]B
```

ftf@fCf<-¼•âŠ®<@“\

```
ftf@fCf<-¼,đ“r't,Ü,Å“ü—í,μ[]A“Á'è,ìfL[]fRf“fsf[]fVf#f“,đ
[]s,ª,±,Æ,Åfj[]f[]f<^È'u,Ü,Å,ì“ü—í•¶Žš—ñ,©,ç^è'v,·,éftf@fCf<-¼,đ
'T,μ•âŠ®,μ,Ü,·[]Bf[]fCf<fhfj[]f[]fh,àŽg—p,Å,«,Ü,·[]B
ftf@fCf<-¼•âŠ®Žž,É<ó”,đŠÜ,pftf@fCf<,đŽw'è,·,é[]ê[]#[]A
ftf@fCf<-¼,ì[]Å[]%o,É[]u"[]v,đ,Â,¯,Ä,,¾,¾,č[]B
cd "\Program files
```

fRf}f“fh-¼•âŠ®<@“\

```
fRf}f“fh[]s,ì[]Å[]%o,ì•¶Žš—ñ,đ•âŠ®,·,é[]ê[]#[]A
```

fjXffBfCEfNfgŠ,ðCEŸ[]ð,μ,ÄfRf}f“fh-¼,ð•âŠ®,·,·,é<@”\,à,·,è,Ü,·[]B
(.com .exe .bat .pif .cws .lnk Šg’£Žqftf@fCf<,ð’í[]Ù)

fjfbfg[]AfRfs[] []Afy[] [fXfg<@”\

fNfŠfbf{[] []fh,Æ,ìff[] [f^,ì,â,èŽæ,è,ð[]s,ì,Ü,·[]B

,»,ê,¼,ê Ctrl + X, Ctrl + C, Ctrl + V ,ÁŽÀ[]s,Á,«,Ü,·[]B

,½,¾,μ[]A•¶Žš—ñ,ª’l’ð,³,ê,Ä,ç,È,ç[]ê[]ž,Í Ctrl + X, Ctrl + C ,í[]A

^ê”Ê•¶Žš,Æ,μ,Ä^μ,í,è,Ü,·[]B

(Windows 3.0 ,Æ,ìCEÝŠ·,ì,½,β Shift+Del, Ctrl+Ins, Shift+Ins ,à

Žg—p%oÄ”\,Á,·[]B)

ŠÂ«•ï[]”ŽQ[]Æ<@”\

echo %path% ,Æ,·,è,î[]ApathŠÂ«•ï[]” ,ÉŠY“- ,·,·,é•¶Žš—ñ,É

•İŠ·,³,ê,Ü,·[]B

fj[] [f]f<^Ê’u%oE^Ú“ ® []”[]A Ctrl+L

fj[] [f]f<^Ê’u[]¶^Ú“ ® []©

fj[] [f]f<^Ê’u[]s“ª Ctrl+HOME

fj[] [f]f<^Ê’u[]s-- Ctrl+END

fj[] [f]f<^Ê’u’¼’O[]í[]œ BS[]A Ctrl+H

fj[] [f]f<^Ê’u[]í[]œ DEL

[]s“ª,Ü,Á[]í[]œ Ctrl+BS

[]s--,Ü,Á[]í[]œ Ctrl+DEL

fjXfgfŠ’OÆó•â []ª[]A Ctrl+P

fjXfgfŠŽŸÆó•â []«[]A Ctrl+N

fj@fCf<-¼•âŠ®’OÆó•â Ctrl+[]ª[]A Ctrl+K

fj@fCf<-¼•âŠ®ŽŸÆó•â Ctrl+[]«[]A Ctrl+J

•¶Žš—ñ’l’ð SHIFT + []” or []©

fjfbfg Ctrl + X

fRfs[] Ctrl + C

fy[] [f]Xfg Ctrl + P

ComWin ,lRf}f“fhf%oFf“ ,ÍŽŸ,ì•¶Žš,ð“ÁŽê•¶Žš,Æ,μ,Ä^μ,ç,Ü,·[]B

>, < fŠf_fCfCEfNfg•¶Žš

| fPfcfv•¶Žš

; fRf}f“fhfZfpfCE[] [f^ (’¼’O,É<ó”’ •¶Žš,ª•K—v)

" ^ø—p•,,
 % ŠÂ«•ï" ^ø—p•,,
 ^ '¼Āă,ì"ÁŽê•ŕŽš,ì<@"\,đ□Á,·

ŽQ□Æ "®□if.□fh

(6) ftf@fCf%□□[fvf□f"fvfg<@"\,Å%õ"K,Èftf@fCf<'€□ì

ComWin ,í%õ"K,ÈfRf}f"fh•Ò□W,đŽx%□,·,é,½,ß,É
 ftf@fCf%□□[fvf□f"fvfg<@"\,đ'ñ<Ÿ,μ,Ü,·□B

ftf@fCf%□□[fvf□f"fvfg,Íftf@fCf<^ê——"•ª,Æ□Afrf}f"fh"ü—í"•ª,©,ç
 □□—,³,ê,Ü,·□Bfrf}f"fh"ü—í"•ª,íÊí,ìfRf}f"fh%ofCf",Æ" —l,ì
 fL□['€□ì,Å□AfgfXfgfŠ<@"\,âftf@fCf<-¼•âŠ®<@"\,đ,à,¿,Ü,·□B

ŠefL□[<@"\,ì□à-¾

- © ftf@fCf<^ê——•\Žì,ì'â,«,³,đ□Ø,è'Ö,ì,Ü,·□B
 ('S%æ-Ê•\Žì□A•"•ª•\Žì)
- (fRf}f"fhf%ofCf",©,çftf@fCf<^ê——,ÉftfH□[fjX,đ^Ú,μ,Ü,·□B)
- " fRf}f"fhf%ofCf",ÉftfH□[fjX,đ^Ú,μ,Ü,·□B
- ª fj□[f<,đ□ă,É^Ú"® ,μ,Ü,·□B
- « fj□[f<,đ%□,É^Ú"® ,μ,Ü,·□B
- PageUp fj□[f<,đ^ê•Å•ª□A□ă,É^Ú"® ,μ,Ü,·□B
- PageDown fj□[f<,đ^ê•Å•ª□A□ă,É^Ú"® ,μ,Ü,·□B
- Home fj□[f<,đftf@fCf<fŠfXfg,ì□Å□ă" ,É^Ú"® ,μ,Ü,·□B
- End fj□[f<,đftf@fCf<fŠfXfg,ì□Å%□" ,É^Ú"® ,μ,Ü,·□B
- Space Ā»□Ý,ìfj□[f<^Ê'u,ì□€-Ú,đ'ì'đ□ó'Ô,đ•ï□X,μ,Ü,·□B
- Enter Ā»□Ý,ìfj□[f<^Ê'u,ìftf@fCf<-¼,đfRf}f"fhf%ofCf",É
 fRfs□[,μ,Ü,·□B
 ('ì'đ□ó'Ô,ª□Ý"è,³,ê,Ä,ç,é,Æ,«,í %* ,đfRfs□[)

fRf}f"fhf%ofCf",ì"ÁŽê•ŕŽš

ftf@fCf<^ê——,Å[]Aftf@fCf<,ª'í'ð,³,ê,Ä,ç,é[]ê[]‡
([]Å[]¶[]Æ...,É '*' ^ó,ª, ,é[]ê[]‡)
%* ,í"ÁŽê•¶Žš,Æ,μ,Ä^μ,í,ê,Ü,·[]B
fRf}f"fhf%ofCf" ,Å %* ,ª, ,é•¶Žš—ñ,ðŽÀ[]s,·,é[]ê[]‡[]A
Še'í'ðftf@fCf<-¼,É'u,«Š·,¡,ç,ê,ÄŽÀ[]s,³,ê,Ü,·[]B

—á
*foo.txt
*bar.txt

>del %

---> ŽÀ[]sŽž,É,í
del foo.txt ; del bar.txt
,Æ,È,é[]B

(7) fhf%ofbfO[]•fhf[]fbfvfT[]f[]o[][<@"\[]A'í'ð•¶Žš—ñ<N"®<@"\
frf...[]f[]o[][f,[]fh,Å'í'ð,μ,½•¶Žš—ñ,ðf}fEfX,Åfhf%ofbfO,·,é,±,Æ,Å[]A
fhf[]fbfvftf@fCf<%o»,·,é,±,Æ,ª,Å,«,Ü,·[]B
,Ü,½'í'ð•¶Žš—ñ,ðf_fuf<fNfŠfbfN,·,é,±,Æ,Å[]A
fvf[]fOf%of€,ð<N"®,Å,«,Ü,·[]B

(Æë'€[]ì,É,æ,éfgf%ofuf<,ð"ð,¯,é,½,ß[]A'í'ð"í^í,ª•;[]",ì•¶Žš—ñ,É
,í,½,Á,Ä,ç,é[]ê[]‡,í'í'ð"í^í†,Å^ê"Ô[]¶[]ä,ì•¶Žš—ñ,ì,Ý,ð
'î[]Û,É,μ,Ä,ç,Ü,·[]B
'í'ð,μ,½•¶Žš—ñ,íff[]Æf"f[]gfffBf[]ÆfNfgfŠ,ìftf@fCf<,Æ,μ,Ä
fhf%ofbfN[]•fhf[]fbfv[]^—[],μ,Ü,·,ì,Å[]A^Ó[]},μ,½Æ<%oÊ,Æ^á,æ
[]ê[]‡,à, ,è,Ü,·[]B)

(8) ftf@f"fNfVf#f"fL[]f%of"f`ff[][<@"\
ftf@f"fNfVf#f"fL[],ÉfRf}f"fh•¶Žš—ñ,ðŽw'è,·,é,±,Æ,Å

☐☐v48☐☐,ìfRf}f“fh,ðf{f^f“%oÿ%o☐☐Af}fEfXfNfŠfbfN,Å
<N“® , , , é, ±, Æ, ð%oÅ“\, É, È, è, Ü, ·☐B

“o~^•û-@,í

☐uf☐fjf...☐[fo☐[☐v☐“☐ufìfvfVf#“] ☐“☐uf%of“f`ff☐[☐v

,Å☐s,ç,Ü,·☐B

,Ü,½☐A

☐uf☐fjf...☐[fo☐[☐v☐“☐ufìfvfVf#“☐v☐“☐uŠÅ«☐v☐“☐uftf@f“fNfVf#“fL☐[☐v

,Åftf@f“fNfVf#“fL☐[,ð•\Ž!,Å,«,Ü,·☐B

“o~^ , , , éfRf}f“fh,í ComWin ,ð%oðŽß,Å,«,éRf}f“fh,È,ç,È,ñ,Å,à%oÅ“\
,Å,·☐B

—á,ì,î F1 ,É notepad ,ð“o~^ , , , é, Æ

F1,ð%oÿ%o,µ,½,è☐Af}fEfXfNfŠfbfN, , , , é, ±, Æ, Å notepad ,ðŽÀ☐s,µ,Ü,·☐B

,±,ì,Æ,«,É☐AfRf}f“fhf%ofCf“ ,â'í'ð•¶Žš—ñ,É readme.txt ,Æ,ç,π•¶Žš—

ñ,^a

'¶☐Ý,µ,Ä,ç,ê,î☐Anotepad readme.txt ,Æ☐☐☐,µ,ÄŽÀ☐s,µ,Ü,·☐B

,Ü,½☐Aftf@f“fNfVf#“fL☐[fo☐[,ìŠef{f^f“ ,í

fhf%ofbfO☐•fhf☐fbfvfNf%ofCfAf“fg,É,È,Á,Ä,“ ,è☐A

ComWin ,âftf@fCf<f}fì☐[fWff,© ,çftf@fCf<-¼,ðfhf☐fbfv, , , , é, ±, Æ, Å☐A

,» ,ê,ç,ð^ø” ,Æ,µ,Ä☐A“o~^fRf}f“fh,ðŽÀ☐s,µ,Ü,·☐B

Shift fL☐[“™ ,ð%oÿ%o,µ,½☐ó'Ô,Å<N“® , , , é, Æ•\Ž!,^a—

☐,ê,é☐ê☐☐,^a , , è, Ü, ·, ð☐A

ŠÅ« ,É^«%oe<ç,ð<y,Ú, , , , ±, Æ, í , , è, Ü, ¹, ñ☐B

ŽQ☐Æ Launcher_f☐fjf...☐I

(9) ftfHf“fg☐A”w☐Ei☐F,ð☐Ý'è☐A3-Df_fCfAf☐fO☐Af☐☐[f<fo☐[,ìŽg—p

ESCfL☐[,ð%oÿ, , , , ±, Æ, Å☐fjf...☐[fo☐[,^a☐o☐E»,µ,Ü,·☐B

ftfHf“fg☐A”w☐Ei☐F☐A<N“® ŽžfTfCfY,ð☐D,Ý,ì,à,ì,É•Ī,ì, , , , é, ±, Æ, ð, Å,«,Ü,·☐B

File->Save Setting ,Å☐E»☐Ý,ì☐Ý'è,ð•Ú'¶,Å,«,Ü,·☐B

,Ü,½f_fCfAf□fO,đ3-D%»;,·,éDLL,É'í%ž,μ,Ä,ç,Ü,·□B
ctl3d.dll, ctl3dv2.dll ,đ,“Ž□,¿,ì•û,Í ComWin ,Á,à,²Žg—p,,¾,³,ç□B
ComWin ,ìŠef_fCfAf□fO,² 3-D %»;,μ,Ü,·□B

fjfbfg□•fy□[fXfg□Af,□[fh•ï□X□Afwf<fvf{f^f“,ì,Â,ç,½
Windows 95 f%ofCfN,Èfc□[f<fo□[,ìŽg—p,²%»Ä“\,Á,·□B

fLfffvfVf#f“fo□[,đ□Á,μ,½,è□A□¶f}□[fWf“,đ,Æ,é,±,Æ,²%»Ä“\,Á,·□B

ŽQ□Æ f□fjf...□[fŠftf@fçEf“fX

(10) fL□[Š,,,è“-,Ä,ì•ï□X,²%»Ä“\
f□fjf...□[fo□[,©,ç□ufL□[Š,,,è“-,Ä□v,đ'í'đ,·,é,Æ
Še'€□ì,É'í,μ,Äft□[fU□[,²“ÆŽ©,ìfL□[,đ
Š,,,è“-,Ä,é,±,Æ,²%»Ä“\,É,È,è,Ü,·□B
Še'€□ì,É'í,μ,Ä□A—D□æfL□[□ACEÁ'èfL□[□A•â□•fL□[,ì
3,Á,ìfL□[,đŠ,,,è“-,Ä,é,±,Æ,²%»Ä“\,Á,·□B
“~Ží,ìfL□[Š,,,è“-,Ä,²s,í,è,½□ê□#□A
—D□æ□ACEÁ'è□A•â□•,ì□#“Ô,É—D□æ,³,è,Ü,·□B

ŽQ□Æ f□fjf...□[fŠftf@fçEf“fX

(11) %»ß<Ž,ì□o—í,đŽQ□Æ,Á,«,é
ESCfL□[,đ%Ÿ,·,±,Æ,Á%»ß<Ž,ì□o—í,đŽQ□Æ,Á,«,Ü,·□B
,Ü,½File->Save Log ,Á%»ß<Ž,ì□o—í,đftf@fçf<,É,·,é,±,Æ,²,Á,«,Ü,·□B
Edit->Copy,Á'í'đ"í^í,đfNfŠfbfvf{□[fh,É"']'—,Á,«,Ü,·□B
(%»ß<Ž,ì□o—í,í500□s,Ü,Á)

ŽQ□Æ “®□ìf,□[fh

(12) Windows, shell, µ, ĀŽg, x

(, ±, ì<@“\, í16bit” Ā, Ā, ì, ÝŽg—p%oĀ“\, Ā, ·□B)

menu Bar --> Option --> environment , ìf_cfAf□fO, Ā
□uUse as the shell□v, ìf`fFbfNf{fbfNfX, ð‘I’ð□ó’Ô, É, ·, é, Ā
fVfFf<, Ā, µ, Ā system.ini , É“o~^, ^, é, Ü, ·□B
, Ü, ½□Af`fFbfNf{fbfNfX, ð”ñ‘I’ð□ó’Ô, É, ·, é, Ā
‘¼‘O, ÉŽg—p, ^, é, Ā, ç, ½fVfFf<, É-ß, µ, Ü, ·□B

‘□^Ó Žè□’, «, â‘¼, ìf\ftfg, Ā system.ini, comwin.ini , ð□’, «Š·, ì, ½□ê□‡
‘¼‘O, ìfVfFf<, a”½%of, ^, é, È, ç□ê□‡, a, , è, Ü, ·□B

(Žè□’, «·ï□X, ì□ê□‡)

system.ini, ì[boot] shell=progman.exe, ì
<L□q, ðshell=comwinx.exe, Ā·ï□X, ·, é, ÎWindows, ìfVfFf<, Ā, µ, Ā—~—
p, Ā, «, Ü, ·□B

fVfFf<, Ā, µ, ĀŽg—p, ·, é□ê□‡
comwinx.exe comwld.exe comwld.pif vcomwd.386 comwin.dll
comwin.hlp comwins.dll comwreg.exe comwtbar.dll , ð
•K, ^ È%o°, ìfffBfĀfNfgfŠ, ì, Ç, é, ©, É‘u, ç, Ā,, ¾, ^, ç□B
windowsfffBfĀfNfgfŠ
windowsfVfXfef€fffBfĀfNfgfŠ
ŠĀ<«·ï□” PATH , ĀŽw’è, ^, é, ½fffBfĀfNfgfŠ

(‘□^Ó), È, ñ, ç, ©, ìfgf%ofuf<, a”□¶, µ, Ā Windows , a<N“® , Ā, «, È, -
, È, Ā, ½, Ā, «, ì□A
system.ini , ì [boot] shell= , ì<L□q, ð□Ashell=progman.exe
, Ā, ·, é, Î□A
□Ā^« , ìŽ-‘Ô, ì, ^, ç, é, Ü, ·□B

Windows 3.1 , ĀŠ®‘S, ÉĀÝŠ·□«, ì, È, çŠĀ<«, ĀfVfFf<“o~^, µ, Ā, ç, È, ç, ì, É□A
fVfFf<, ĀĀë”FŽ~ , ·, é□ê□‡, a, , è, Ü, ·□B, » , ì□ê□‡□Acomwin.ini , ì
[etc] , É shell=0 , Ā<L□q, µ, Ā,, ¾, ^, ç□B

(13) fXf^[fgfAfbfv<@"\A<N"®ŽžfIfvfVf†f",ÅŠÅ<<®"ö

<N"®ŽžfIfvfVf†f"

comwinx /t fLfffvfVf†f"-¼

,ÆŽw'è,·,é,±,Æ,ÅAcomwinx.exe ,ìfLfffvfVf†f"-¼,ð

•ïX,·,é,±,Æ,ª%oÅ"\,Å,·B

•i",ì ComWin ,ð<æ•Ê,μ,½,ç,Æ,«,ÉŽw'è,μ,Ä,,¾,¾,çB

comwinx /e:"Žš

,ÆŽw'è,·,é,±,Æ,ÅAComWin "à,ÅŽg—p,·,éŠÅ<<•ï",ì,½,β,ì—î^æ,ð

Šm•Û,μ,Û,·BSù'è'l,í 1024 ,Å,·B

comwinx /c fRf}f"fh-¼ [fIfvfVf†f"]

,ÆŽw'è,·,é,±,Æ,Å ComWin ,ì<N"®Žž,ÉfRf}f"fh,ðŽÀ[s,μ,Û,·B

ComWin ,ì%oðŽβ,Å,«,éfRf}f"fh,Å, ,ê,î,ç,ì,æ,κ,È•¶Žš—ñ,Å,à%oÅ"\,Å,·B

(/c fIfvfVf†f" ,í•K, ,ŠefIfvfVf†f" ,ìÅÆã,ÉŽw'è,μ,Ä,,¾,¾,çB)

Windows ,ìfvfFf<,Æ,μ,Ä—~—p,·,éêêB

shell=comwinx.exe /c cwstart.bat ; <--- Æë,è

ã<L,ì,æ,κ,ÉfIfvfVf†f" ,ðŽw'è,Å,«,Û,¹,ñB

,±,ìêêBffj...[,©,ç Option --> Arguments ,ð'l'ð,μ,Ä,,¾,¾,çB

fefLfXfgf{fbfNfX,É [/e:2048 /c cwstart.bat] ,ì,æ,κ,É"ü—í,·,é,îA

ComWin ,í<N"®Žž,ìfRf}f"fh,Æ,μ,Ä%oðŽβ,μ,Û,·B

comwin.ini ,íŽŸ,ì,æ,κ,ÉX[V,¾,ê,Û,·B

—á

[StartUp]

Arguments=/e:2048 /c cwstart.bat

ã<L,ìŽw'è,ìfvfFf<,Æ,μ,ÄŽg—p,·,éêêB,ì,Ý—LÆø,Å,·B

fXf^[fgfAfbfv<@"\

fvfFf<,Æ,μ,ÄŽg—p,μ,½êêBfXf^[fgfAfbfv<@"\,ª—~—p,Å,«,Û,·B

comwin.ini,ÉŽŸ,ì,æ,κ,É<L[q,μ,Ä,,¾,¾,çB

[StartUp]

<<N" ®, ·, éf, fWf... [f<-¼ [iflfvfVf#f" Žw'è%oÂ) = <N" ® [ó'Ô>

—á)

[StarUp]

winclock=1

winfile=6

,iĀ`Ž® ,Ā"ü—í,μ,Ä,,¾,³,č□B

<N" ® [ó'Ô, íŽŸ, ì" 'l, ðŽw'è, Ā, «, Ü, ·□B

0 (SW_HIDE fEfBf"fhfE, ì" ñ •\Ž!))

1 (SW_SHOWNORMAL fEfBf"fhfE, ðfAfNfefBfu

%o», μĀ³, ì [ó'Ô, Ā •œĀ³ •\Ž!)

2 (SW_SHOWMINIMIZED fEfBf"fhfE, ðfAfNfefBfu%o», μfAfCfRf" •\Ž!)

3 (SW_SHOWMAXIMIZED fEfBf"fhfE, ðfAfNfefBfu%o», μ [Ā'á

%o»fEfBf"fhfE •\Ž!)

4 (SW_SHOWNOACTIVATE fEfBf"fhfE, ð' O, ì •\Ž! [ó'Ô, Ā •\Ž!)

5 (SW_SHOW fEfBf"fhfE, ðfAfNfefBfu%o», μĀ» [Ý, ì' Ê' u [EfTfCfY, Ā •\Ž!)

6 (SW_MINIMIZE fEfBf"fhfE, ìfAfCfRf" •\Ž!)

7 (SW_SHOWMINNOACTIVATE fEfBf"fhfE, ðfAfCfRf" ,Ā •\Ž!)

8 (SW_SHOWNA fEfBf"fhfE, ìĀ» [Ý [ó'Ô, Ā

9 (SW_RESTORE SW_SHOWNORMAL, Ā" , ¶)

[Žš, ¢'½, ,Ā •s •Ö, ð<, č, é, ĀŽv, č, Ü, ·, ¢□A

, ±, ì [Žš, í WinExec API ,É"n, ·'æ2^ø, « [, » , ì, à, ì, Ā, ·□B

'Ê [í, íŽŸ, ì3, Ā, μ, © •K—v, È, č, ĀŽv, č, Ü, ·□B

•W [Ā<N" ® winfile=1

[Ā'á%o»<N" ® winfile=3

fAfCfRf"%o»<N" ® winfile=6

fXf^ [[fgfAfbfv<@"\, í%oß<Ž, Ā, ìĀÝŠ • [«, ì, ½, ß, É—p^Ó, μ, Ā, , è, Ü, ·□B

fofbf` fXfNfŠfvg, ìŽg—p, Ā, «, é<N" ® ŽžfVfVf#f" ,ð, ²Žg—p, ,¾,³,č□B

ŽQ□Ā Windows, ìshell, Ā, μ, ĀŽg, ¢

(14) fŠf_fCfCEfNfg AfpfCfv<@“\,Å_“î,ÈfefLfXfg^—

fŠf_fCfCEfNfg AfpfCfv,Æ,ç,æ—pCEê,Í•W€“üo—Í<@“\,ì<ì'ì—á,Æ,μ,Ä
Žg—p,³,ê,é—pCEê,Å,·BWindows ,É,Í DOS ,â UNIX ,Åd—v,È<@“\
,Æ,È,Á,Ä,ç,é

- W€“üo—Í,đTf|[]fg,·,é<@“\,đŽ,Á,½fVfFf<,Í'¶Y,μ,Ü,¹,ñB
- W€“üo—Í<@“\,ì'f°,ç,μ,³,í'½,,ì•¶CE£,Åq,×,ç,ê,“ ,èA
, ,ç,½,ß,Äà^{-3/4},·,é•K—v,Í,È,ç,ÆŽv,ç,Ü,·,ªA
,±,ìê,ÅAŽ,,ª<'²,μ,½,ç,±,Æ,ÍŽÿ,ì“_,Å,·B

u•W€“üo—Í,Íff[f^[],ì“üo'•'u,đ'ŠÛ%»»,·,é,±,Æ,ÅA
fvf[]Of%of}[]Aft[]fU[],đ-â,í,,Aff[f^[],»,ì,à,ì,ÉA
^ÓŽ~,đW't,³,¹,éBv,Æ,ç,æ,±,Æ,Å,·B

fvf[]Of%of}[],í—]ª,È,±,Æ,đl,|,,A[]f^ ,Éff[f^[]%Á[]H,ÍfAf<fSfŠfYf€ ,đ
'Ç<,Å,«,Ü,·,μAft[]fU[],í—]ª,È'€ì,đ,¹,,É[]f^ ,É•K—v,Èff[f^[],đ
Žæ“^{3/4},·,é,±,Æ,ª,Å,«,Ü,·B

,»,±,ÅAComWin ,Í Windows ä,É•W€“üo—Í<@“\,đŽÀCE»,μ,Ü,μ,½B
Žg—p-@,ÍŠÈ'P,ÅADOS ,â UNIX ,Å,““éö,Ý,ì ">", ">>", "<", "|" ,đ
—p,ç,é,^{3/4}, ,Å,·B

,Ü,½'í%žf|ftfg,ì,è,ù,àŠÈ'P,ÅAComWin ,ì'ñ<ÿ,μ,Ä,ç,é API
Puts, Gets, Fputs, Fgets ,đ DOS f|ftfg,đì,éŠ'Šo,ÅŽg—p,·,ê,îA
,»,ìŽŽ“_,Å•W€“üo—ÍTf|[]fgf|ftfg (ftfBf<f^[]),ª,Å,«, ,ª,è,Ü,·B
,à,ž,è,ñAComWin ,ì API ,đ—p,ç,Äì,ç,ê,½ Ver. 2.01 CEöŠ'Ö,Íf|ftfg,à
ComWin Ver. 2.01 ^Èä,đ—p,ç,é,±,Æ,Å•W€“üo—Í'í%ž,É,È,è,Ü,·B

'^Ó

- W€“üo—Í,ÍfefLfXfgftf@fCf<,ì,Ý,đ'î[]Û,É,μ,Ä,ç,Ü,·B
- DOSfRf}f“fh,Æ•¹—p,Å,«,È,ç,½,ßA<@“\,ì¶Y'è%đ[]œ,ª,“ ,±,È,ì,Ü,·B
Žg—p,·,é,½,ß,É,ÍA[]uf[]jf...[]fo[][]v ---> []uf|fvfVf#f“[]v --->
[]uŠÂ<«[]v ---> []uftfBf<f^ ,đŽg—p[]v ,Íf`fFbfN,đ ON ,É,μ,Ä,,^{3/4},³,çB
,±,ìê[]#[]ADOSfRf}f“fh,É'í,μ,ÄfŠf_fCfCEfNfg“™ ,í

□ufind "abc" *.txt ^> find.lst□v“™,Å□s,!,Ü,·□B
c)"CON", "PRN", "AUX" ,Æ,ç,Á,½fXfyfVfff<ftf@fCf<,ÍŽg—p,Å,«,Ü,¹,ñ□B
œë,Á,ÄŽg—p,·,é,Æ□AfVfXfef€fnf“fO,ð^ø,«<N,±,μ,Ü,·,!,Å'□^Ó,μ,Ä,-
,¾,³,ç□B
d)"NUL" ftf@fCf<,Í—~—p,Å,«,Ü,·,!,Å□Afofbf`ftf@fCf<,!,È,©,Å
—]•^a,Èf□fbfZ□[fW,ð□o—Í,μ,½,,È,ç□ê□±“™□A—~—p,μ,Ä,,¾,³,ç□B

(15) 'Ê□Mf|□[fg,É'î%ž,μ□Af}f<f`ft□[fU□[□AfŠf,□[fgfAfNfZfX,º%oÂ“\

ComWin ,Í term fRf}f“fh,ðŽÀ□s,·,é,±,Æ,ÅŠÈ^Ö'Ê□Mf|ftfg,É,È,è,Ü,·□B
fefLfXfg,¾,¯,ì—Žó□M,ð□s,α□ê□±,ÍŽèœy,É—~—p,Å,«,Ü,·□B
□Y'èf_fCfAf□fO,É•K—v□€-Ú,ð“ü—Í,μ,ÄŽÀ□s,·,é,¾,¯,Å,·□B

ComWin ,Í ctty fRf}f“fh,ðŽg—p,·,é,±,Æ,É,æ,è□A
“ü□o—ÍfffofCfX,ð'Ê□Mf|□[fg,É□Ø,è'Ö,!,é,±,Æ,^a,Å,«,Ü,·□B
fRf“fsf...□[f^□[,ð•i□”Žg—p,!,û,í□A
fŠf,□[fg,©,ç RS-232C fCf“f^□[ftfF□[fX,ðœo—R,μ,Ä□A
ComWin ,ì<N“® ,μ,Ä,ç,ézfXfgf}fVf“ ,ì
fn□[fhfEfFfAfŠf\□[fX(CPU□Af□f,fŠ□AfffBfXfN“™),ð—~—p,Å,«,Ü,·□B
—~—p,·,é,½,β,É,ÍfŠf,□[fg'α,Å'Ê□Mf|ftfg,ð□€”ð,μ,Ä,,¾,³,ç□B
'Ê□Mf|□[fg,ì□Y'è,Í mode fRf}f“fh,Å□Y'è,μ,½,à,!,É, ,í,¹,
f□□[fjf<fGfR□[ON ,ì□ó'Ô,ÅŽg—p,μ,Ä,,¾,³,ç□B

,±,ì<@“\,ð—~—p,·,é,±,Æ,Å Windows ,ì GUI •”•^aÈŠO,ÌfT□[frfX,Í
fŠf,□[fg'α,Å—~—p%oÂ“\,É,È,è,Ü,·□B
—á,!,ì□A286f}fVf“ ,ðŽg—p,!,û,^a Windows f}fVf“ ,ÉfAfNfZfX,·,é,±,Æ,Å
Windows ,ì f□f,fŠŠÇ—□“™ ,ÌfT□[frfX,ð—~—p,Å,«,Ü,·□B

,Ü,½fŠf,□[fg,©,çzfXfgf}fVf“ ,ð□\$œä,·,é,±,Æ,Å Windows fVfXfef€,Å
f}f<f`ft□[fU□[ŠÂ«<,ðŽÀœ»,Å,«,Ü,·□B('¼□l,^aŽg—p't,ÍzfXfgf}fVf“ ,ð
fŠf,□[fgfVfffbfjgf_fEf“ ,·,é,Æ,ç,α'É%oð,È—£,ê<Æ,àŽÀœ»,Å,«,Ü,·□B

'Ê□M'[-<<@“\,Æ'Ê□MfT□[fo□[<@“\,ð'g,Ý□±,í,¹,é,±,Æ,É,æ,è□A
“K“- ,ÈfP□[fuf<,ð—p^Ó,·,é,ÍfŠf,□[fgfffobfO,ÉŽg—p,·,é

, ±, Æ, à, Å, «, Ü, · □ B

Ž Q □ Æ ctty, mode, term

(16) Š Å « « • ĩ □ " f T □ [f o □ [< @ " \

, ±, ±, Å, ĩ u Š Å « « • ĩ □ " f T □ [f o □ [□ v, Æ, ĩ u Ž q f v f □ f Z f X, É Š Å « « • ĩ □ " , ð
Æ p □ ³, Å, «, é f v f □ f O f % f € f □ □ [f □ □ [□ v, Æ, ç, x ^ Ó - i, Å, · □ B
DOS , Å, ĩ command.com , É ' Š " - , · , é < @ " \ , Æ □ [, ĩ , Å , , ¾ , ³ , ç □ B
DOS , â UNIX , ĩ □ ç Š E, Å, ĩ , ² , · □ ' Ê , ĩ < @ " \ , È , ĩ , Å , · , ³ □ A
Windows , ĩ □ ç Š E, É , ±, ĩ < @ " \ , ð f T f □ □ [f g, μ, Ä, ç, é f v f □ f O f % f € , ĩ ' ¶ □ Ý , ð
Ž , , ĩ ' m, è, Ü , ¹, ñ □ B

Š Å « « • ĩ □ " f T □ [f o □ [< @ " \ , ð Ž g — p , · , é , ±, Æ, Å - Ú " ĩ , ĩ f v f □ f O f % f € , É , , Å , ½
Š Å « « • ĩ □ " , ð Windows , ð □ Ä < N " ® , ¹ , , , É □ Ý ' è , · , é , ±, Æ, ¾ % Å " \ , É , È , è, Ü , · □ B
— á , ĩ , ĩ □ A Windows , Æ DOS , Å □ A " - ¼ , Å , Ê Æ Ä , ĩ f R f } f " f h Ž g — p , · , é □ ê □ # , É
PATH , ð □ Ø , è ' Ö , ĩ , é , ±, Æ, ¾ % Å " \ , Å , · , μ □ A ' Ê □ í 128 • ¶ Ž š , Ü , Å , μ , © □ Ý ' è , Å , « , È , ç
PATH Š Å « « • ĩ □ " , ð Š e f A f v f Š - ^ , É • K — v , È • " • ¾ , ¾ , □ Ý ' è , · , é , ±, Æ, Å □ A
• ¶ Ž š □ " , ĩ • s ' « , ð • â , ĩ , Ü , · □ B

Š Å « « • ĩ □ " f T □ [f o □ [< @ " \ , ð — ~ — p , · , é , ½ , ß , É , ĩ □ A environment f □ f j f ... □ [, Å
□ u Ž q f v f □ f Z f X , Ö Š Å « « Æ p □ ³ □ v , ð f ` f F f b f N , · , é , © □ A win f R f } f " f h , É
/ e f ĩ f v f v f f # " , ð • t , ~ , Ä < N " ® , μ, Ä , , ¾ , ¾ , ç □ B

' □ ^ Ó

Š Å « « • ĩ □ " f T □ [f o □ [, ĩ Windows f v f □ f O f % f € , É , μ , © — ~ — p , Å , « , Ü , ¹, ñ □ B
DOS f v f □ f O f % f € □ A Win32 s f v f □ f O f % f € , Å , ĩ — ~ — p • s % Å , Å , · □ B
(LoadModule API , ĩ Ž d — ĩ)

Š Å « « • ĩ □ " f T □ [f o □ [, ð Ž g — p , μ, Ä, ç, é □ ê □ # □ A □ e f v f □ f Z f X , ĩ Ž q f v f □ f Z f X , Ö
Š Å « « • ĩ □ " — ĩ ^ æ , ð ' ñ < Ý , · , é , ĩ , Æ ^ ø , « ' Ö , ĩ , É □ A Ž q f v f □ f Z f X - { — ^ , ĩ
Š Å « « • ĩ □ " — ĩ ^ æ , ð ^ ø , « Ž ó , ~ , é □ \ ' ç , É , È , Å , Ä , ç , é , æ , x , Å , · □ B
(LoadModule API , ĩ • s % Å % ð , È Ž d — ĩ)
, ±, ĩ Ž d — ĩ , É , æ , è □ e f v f □ f Z f X , ĩ Ž q f v f □ f Z f X , ð < N " ® , · , é " x , É

□,μ,, ,ÂŽg—pf□f,fŠ—ì^æ,đŠg'â,μ,Ä,ç,«,Ü,·□B
“-‘R□A□efvf□fZfX,đ□I—^{1,3,1},ê,Î,» ,ì—ì^æ,à%đ•ú,³,ê,Ü,·,ì,Â□A
-â'è,í,È,ç,ì,Â,·,ª□A—B^ê ComWin ,ªfvfFf<□ó'Ô,ì□ê□‡,í
Windows ,đ<N“® ,μ,Ä,ç,éŠÔ□A□,μ,, ,Ãf□f,fŠ,đ^3” —,μ,Ä,ç,«,Ü,·,ì,Â□A
—^-^Ó,μ,Ä,“,ç,Ä,,^{3/4,3},ç□B
(fvfFf<□ó'Ô^ÈŠO,Â,Í ComWin ,đ□I—¹,·,é,Æf□f,fŠ,Í%đ•ú,³,ê,Ü,·□B)

(17) fEfCf<fX,ìŽ©ÆÈ□f'f<@“\
,^{1/2},ç,μ,^{1/2}<@“\¹,Â,í,È,ç,ì,Â,·,ª□A<N“® Žž,Æ□I—¹Žž,É
Ž©•ª,ìftf@fCf<fTfCfY,đf`fFfbfN,·,é<@“\¹,đŽ□,Á,Ä,ç,Ü,·□B
,μ,^{1/2},ª,Á,ÄfEfCfXf<,ÉŠ'□đ,μ,^{1/2}□ê□‡,É,í□Af_fCfAf□fO,ª•\Ž|,³,ê,Ü,·□B
,^{1/2},^{3/4},μ□AŽ©•ª^ÈŠO,ìftf@fCf<,đf`fFfbfN,·,é,í, ,Â,í,È,ç,ì,Â
%ß“x,ìŠú'Ò,ÍŽ□,^{1/2},È,ç,Â,,^{3/4,3},ç□Bf□fNf`f“<@“\¹,í, ,è,Ü,¹,ñ□B
□i, , ,Ü,Â,àŽ©•ª,ªŠ'□đ,μ,^{1/2},©,Ç,κ,©,μ,©,í,©,è,Ü,¹,ñ,μ□A
,·,x,Ä,ìfEfCf<fX,É'í,μ,Ä—LÆø,È,í, ,Â,í, ,è,Ü,¹,ñ□B□j

5. □, "x, ÈŽg—p•û-@

- (1) ComWin ,ì API ,ðŽg—p,μ,ÄfLfff%ofNf^⊕enfRf}f“fh,ðŠg’£,Å,«,,é
- (2) fRf}f“fhŽÀ□s•”•ª,ðŠg’£%ü—Ç,Å,«,,é
- (3) ft□[fU□[fCf“f^□[ftfF□[fX,ì’uŠ,ª%oÅ”\
- (4) DOSfRf}f“fh,ðComWin’<,ÅŽÀ□s%oÅ”\
- (5) ANSIfGfXfP□[fvfV□[fPf“fX,ªŽg—p%oÅ”\
- (6) cshf%ofCfN,È□\’ç%o»fXfNfŠfvfg
- (7) Unicode’î%ožfRf“f□[f<

ŽQ□Æ

EXPORTŠÖ□”,ì□à-¾

(1) ComWin ,ì API ,ðŽg—p,μ,ÄfLfff%ofNf^⊕enfRf}f“fh,ðŠg’£,Å,«,,é

Windows ,ìfvf□fOf%of€ ,ð□ì□-, ,.é□ê□#□Å□%o,É-â’è,É,È,é,ì,í□A
 •K—v,à,È,çfEfBf“fhfE,ð□ì□-, ,.é,ì,É-³’É,ÈŽŽŠÔ,ð”i,â, ,.±,Æ,Å,·□B
 □Å<β,íŠe□^—□⊕En,à□H•v,μ,Ä DOS Š’Šo,Åfvf□fOf%of~f“fO,Å,«,,é,æ,κ,È
 fNf%ofXf%ofCfuf%ofŠ,ð’ñ<Ÿ,μ,Ä,ç,Ü, ,.ª□A
 □¶□-, ,³,é,½fvf□fOf%of€ ,íŽÀ—p□«,,ª, ,.é,Æ,íŽv,!,Ü,¹,ñ□B
 ,»,,±,Å ComWin ,ìfLfff%ofNf^⊕en,ìfRf}f“fh,ð□ì□-, ,.é•K—v,ì, ,.é
 ft□[fU□[,ì,½,β,É“ü□o—í⊕En,ì API ,ð’ñ<Ÿ,μ,Ä,ç,Ü,·□B
 ŠeAPI ,íŠî-{"I,ÉANSI C ,ìŽd—I,É□€ ,¶,Ä, ,.è
 □V,μ,Šw□K, ,.é□€-Ú,í□,È, ,.é,æ,κ,É“w,β,Ä,ç,Ü,·□B
 ,Ü,½ ComWin ,ì API ,ífffofCfX”ñ^È’¶,ð-ÚŽw,μ,Ä, ,.è□A
 ComWin ‘î%ožfvtfg,ì“ü□o—í,ífffBfXfvf⊕efC□AfL□[f{□[fh,Æ,ç,κ
 ŠT”O,ð’´%oz,μ□A□ê-â“Á%o», ,³,é,½ ComWin —p’[---,ð—p^Ó, ,.é,±,Æ,Å□A
 flfbfgf□□[fN□ADDE□AOLE “™ ,É,à’î%ož,Å,«,,é,ÆŽv,ç,Ü,·□B

ŽŸ,ì ANSI□€<’ API ,ð’ñ<Ÿ,μ,Ä,ç,Ü,·□B

LONG FAR PASCAL Puts(LPSTR);

LPSTR FAR PASCAL Gets(LPSTR);

LONG FAR PASCAL Fputs(LPSTR, LPVOID);

```

LPSTR FAR PASCAL Fgets(LPSTR, LONG, LPVOID);
LONG FAR PASCAL System(LPSTR);
LONG FAR PASCAL Fwrite(LPVOID, LONG, LONG, LPVOID);
LONG FAR PASCAL Fread(LPVOID, LONG, LONG, LPVOID);
LONG FAR PASCAL cwFputsW(LPWSTR, LPVOID);

```

```

,Ü,½ŽŸ,İfT[]fX API ,à'ñ<Ÿ,μ,Ü,·B
LONG FAR PASCAL Getch(void);
LONG FAR PASCAL Inkey(void);
DWORD FAR PASCAL GetComWinLong(DWORD, DWORD);
int FAR PASCAL

```

```

MakeArgument(HINSTANCE,LPSTR,LPSTR,LPINT,LPSTR,int);
LONG FAR PASCAL cwPutevn(LPSTR);
LPSTR FAR PASCAL cwGetenv(LPSTR);
LONG FAR CDECL cwFprintf(LPSTR, LPSTR, ...);

```

```

[]ã<LŠÖ[]",Æ"ˆ<@"\•Ê-¼,İŽŸ,İŠÖ[]"ÆQ,à, ,è,Ü,·B
cwPuts(=Puts), cwGet(=Gets), cwFputs(=Fputs), cwFgets(=Fgets),
cwSystem(=System), cwGetch(=Getch), cwInkey(=Inkey)
cwFwrite(=Fwrite), cwFread(=Fread)

```

```

ŽQ[]Æ Puts, Gets, Fputs, Fgets, System,
Getch, Inkey, Fwrite, Fread,
GetComWinLong, MakeArgument,
cwPutenv, cwGetenv,
cwFprintf, cwFputsW,
hello.c, sample1.c, sample2.c

```

(2) fRf}f"fhŽÀ[]s"•ª,đŠg'£%ü—Ç,Å,«,é

```

DOS ,İ[]čŠE,É,Í command.com[]AUNIX ,İ[]čŠE,É,Í csh "™
,»,İ'¼'½,,İ—D,ê,½fLfff%ofNf^fVfFf<,ª'¶[]Ÿ,μ,Ü,·,ª[]A
<«'Ê,μ,Ä,č,é'Z[]Š,Í[]AŽÀ[]sE`Ž®,ª^ê,Â,İftf@fCf<,É,È,Á,Ä," ,è[]A
ft[]fU[][,İŠg'£,ª"ñ[]í,É[]č"i,Å, ,é,Æ,č,«,±,Æ,Å,·B

```

,» ,ì, ½, ßft [fU [, ðV, µ, fLfff%ofNf^fVfFf<, ð [[- , , é, ½, ß, É, Í
, , x, Ä, ì ^ - [, ðŽ © 'O, Å [, ç, È, - , ê, Î, È, ç, , [A' å • ì, È [ç "i, ð"º, ç, Ü, • [B

ComWin , ìft [[fU [, ðŽg, ç, â, , çfLfff%ofNf^fVfFf<, ð
"äŠr"l—e^ Õ, È [[[- , Å, «, é, æ, x, ÉŽÝ, ì3, Å, ì ^ - [, ð
DLL , Æ, µ, Ä"Æ—§, ³, ¹, Ü, µ, ½ [B

BOOL FAR PASCAL CallInterpreter(FARPROC FAR *, LPSTR, LPLONG);
BOOL FAR PASCAL CallCommand(FARPROC FAR *, LPSTR, LPLONG);
BOOL FAR PASCAL CallScript(FARPROC FAR *, LPSTR, LPLONG);
(^ø, « [[[A-ß, è' l, ³, ì ^ ê'v, µ, Ä, ç, ê, ÎŠÖ [] -¼, Í" C^ Ó, Å, • [B)

CallInterpreter(%o¼ [ì) (fRf}f"fh•ŕŽš—ñ%oðŽßŠÖ []")
fRf}f"fh•ŕŽš—ñ, ð [ê-â"l, É%oðŽß, , éŠÖ []", Å, • [B
command.com , Ì• jŽG, È%oðŽß, ð [s, ç, Ü, ¹, ñ, ð [A
csh , Ì, ©, È, è• jŽG, È [\•ŕ, ð [^ - [, µ, Ü, • [B
, » , ê, ç, ì [\•ŕ, à [® - [, , é, ±, Æ, Å
ÆÂ [X, ì' P [f, ÈfRf}f"fhÆQ, É• ð%oð, , é, ±, Æ, ð%oÂ" \, Å, • [B
, » , ì ^ - [, ð [ê-â"l, É [s, ç, Ü, • [B

CallCommand(%o¼ [ì) (fRf}f"fhŽÀ [sŠÖ []")
ÆÂ [X, ìfRf}f"fh, ÍŠO•"fRf}f"fh, Æ, µ, Ä [ì [- , , é, ±, Æ, ð%oÂ" \, Å, , ð
 [- , ³, Èftf@fCf<, ð, ½, , ³, ñ, , é [ó'Ô, ÍŠÇ— [[ã•s•Ö, Å, • [B
 [- , ³, ÈfRf}f"fh, ÌCallCommand ŠÖ []", ì, È, ©, É
fRf"fpfNfg, É, Ü, Æ, ß, é, ±, Æ, ÅŽg—pÆø— [, ð [, , Ü, è, Ü, • [B
, Ü, ½ [AŠO•"fRf}f"fh, Æ^ á, ç [A"à•"fRf}f"fh, Ì' [--•", Æ
" - , ŕf^fXfN, ÅŽÀ [s, ³, ê, é, ì, ÅŠÂ«• ì []", ì [Ý'èfRf}f"fh [A
fffBfÆfNfgfŠ• ì [XfRf}f"fh, É—L—~ , Å, • [B

CallScript(%o¼ [ì) (fXfNfŠfVfg%oðŽßŽÀ [s•")
ŠefVfFf<, Ì"ÆŽ © , ìfXfNfŠfVfgÆ¾Æê, ðfTf [[[fg, µ, Ä, ç, Ü, • [B
, µ, ©, µŽc"O, È, ±, Æ, É, Ù, Æ, ñ, Ç, ìfVfFf<, ð'P^ê, ìfXfNfŠfVfgÆ¾Æê, µ, ©
fTf [[[fg, µ, Ä, ç, Ü, ¹, ñ [BComWin , Ì CallScript ŠÖ [] "<@" \, ðŽ [, Å, ½ DLL , ð
Žæ, è [ž, p, ±, Æ, Å• ì []", ìfXfNfŠfVfgÆ¾Æê, ð^ µ, x, ±, Æ, ð%oÂ" \, Å, • [B
 [ìŠefXfNfŠfVfgftf@fCf<, ì<æ•É, ÍŠg'£Žq, Å [s, ç, Ü, • [B)

ŽQ AE CallInterpreter(%o¼i), CallCommand(%o¼i),
CallScript(%o¼i), sample3.c

(3) ft[fU[fCf“f^ [ftfF[fX,ì’uŠ·,ª%oÂ”\

[-- ,Æ,ç,œ—pÆê,í—lX,È^Ó-; ,ÅŽg,í,ê,Ä,ç,Ü,·,ªA
,±,ì,Â,í’P,ÉŠO·” ,Æ,ìfCf“f^ftfF[fX·” ,Æ,ç,œ^Ó-; ,ÅŽg,ç,Ü,·B

fRf}f“fhf%ofCf“f, [fh,àAfrf... [f [f, [fh,àA
fŠf, [fgfAfNfZfX<@”\,à,» ,ê,¼,ê•s [ª,È“_ ,í, ,Á,Ä,à
^ê,Â,ì“Æ—§,μ,½’[--,Â,·B
ComWin ,í “ü—íA”½%ožA o—í,ì3,Â,ð’è<` ,μ,½f,fWf... [f<,ð [- ,·,é,±,Æ,Â
,³,Ü,´,Ü,È’[--,É’í%ož,Â,« ,Ü,·B

—á,í,îAflfbfgf [fN—p,ì’[--,ð [- ,·,é,±,Æ,ÂfŠf, [fgfAfNfZfX,ª
%oÂ”\,É,È,è,Ü,·,μAOLE ,à“È,«l,ß,ê,îA“ÆŽ©,ì“ü—íA o—íA”½%ož,ð
Ž [,Á,½^ê,Â,ì’[--,ÉfpfbfP [fW%o» ,Â,« ,é,à,ì,ÆM,¶,Ä,ç,Ü,·B

[--f]ftfg,íŽŸ,ìžè’±,« ,ð“¥,p,±,Æ,Â [- ,Â,« ,Ü,·B
^È%o,ì10,ìŠÖ [,ð’[--’œ,Â’è<` ,μ,Ü,·B

LONG FAR PASCAL LocalPuts(LPSTR);
LPSTR FAR PASCAL LocalGets(LPSTR);
LONG FAR PASCAL LocalFputs(LPSTR, LPSTR);
LPSTR FAR PASCAL LocalFgets(LPSTR, LONG, LPSTR);
LONG FAR PASCAL LocalSystem(LPSTR);
LONG FAR PASCAL LocalCallCommand(FARPROC FAR *, LPSTR, LPLONG);
LONG FAR PASCAL LocalGetch(void);
LONG FAR PASCAL LocalInkey(void);
LONG FAR PASCAL LocalFwrite(LPVOID, LONG, LONG, LPSTR);
LONG FAR PASCAL LocalFread(LPVOID, LONG, LONG, LPSTR);
(ŠÖ [-¼,í”C^Ó)

FARPROC lpfniO[10] ,ì,æ,œ,ÉŠÖ [,Ö,ìf]fCf“f^ ,ì”z—ñ,ð’è<` ,μ,Ü,·B
lpfniO[0] = MakeProclInstance(hInstance, LocalPuts);

```

lpfnIO[1] = MakeProclInstance(hInstance, LocalGets);
lpfnIO[2] = MakeProclInstance(hInstance, LocalFputs);
lpfnIO[3] = MakeProclInstance(hInstance, LocalFgets);
lpfnIO[4] = MakeProclInstance(hInstance, LocalSystem);
lpfnIO[5] = MakeProclInstance(hInstance, LocalCallCommand);
lpfnIO[6] = MakeProclInstance(hInstance, LocalGetch);
lpfnIO[7] = MakeProclInstance(hInstance, LocalInkey);
lpfnIO[8] = MakeProclInstance(hInstance, LocalFwrite);
lpfnIO[9] = MakeProclInstance(hInstance, LocalFread);
,Æ□%Šú%»μ
comwin.dll ,ì CallCommand ,ðÆÄ,Ñ□o,μ,Ü,·□B

```

ŽQ□Æ CallCommand, sample5.c

(4) DOSfRf}f“fh,ðComWin‘<,ÅŽÀ□s%Å”\

```

ŠÂ««□Ý’èf_fCfAf□fO,ì□uŠg’fRf“f□[f<,ì□Ý’è□v,ð•í□X,·,é,±,Æ,Å
DOS fRf}f“fh,ð ComWin □ã,ÅŽÀ□s,·,é,±,Æ,ª%Å”\,Å,·□B
‘S<@”\,ðŽg,α
,½,β,É,í□AWindowsfffBfÆfNfgfŠ□AWindowsfVfXfef€fffBfÆfNfgfŠ□A
fpfX,ì’É,Á,½fffBfÆfNfgfŠ,ì,ç,·,ê,©,É
comwld.exe, comwld.pif, vcomwd.386 ,ðfRfs□[,μ□A
ŠÂ««□Ý’èf_fCfAf□fO,ì□u•W□€PIF□v,ð comwld.pif ,É,μ,Ä,,¾,³,ç□B
,Ü,½□Asystem.ini ,ì [386Enh] fZfNfVf†f“ ,É
device=vcomwd.386 ,ì<L□q,ð%Å,ì,é•K—v,ª, ,è,Ü,·□B

```

1. DOS fEfBf“fhfE

```

DOS fRf}f“fh,ð•ÊEfBf“fhfE,ÅŽÀ□s,μ,Ü,·□B
•W□€,ì□Ý’è,Å,·□B

```

2. DOS □o—ÍŽæ,è□ž,Ý

```

DOS ,ì□o—Í,ðftf@fCf<,É—Ž,Æ,μ□A,»,ìftf@fCf<,ð
ComWin ‘<,É□o—Í,·,é,±,Æ,Å ComWin ‘<,ÅŽÀ□s,μ,Ä,ç,é,æ,α,É
Æ©,¹,©,¯,éf,□[fh,Å,·□B
“®□ì,í”äŠr“l^À’è,μ,Ä,ç,Ü,·,ª□A“ü—Í,ð<□,β,é DOSfRf}f“fh,ð

```

ŽÀ□s,μ,½□ê□‡,ÍŠ“ ,ÆŒoŒ±,ÁfŠjJfofŠ,μ,È,¯,ê,î,È,è,Ü,¹,ñ□B

3.DOS “ü□o—í”~Šú (VxD)

DOS fRf}f“fh,Æ“ü□o—í,ì”~Šú,ðŽæ,éf,□[fh,Å,·□B
,±,ìf,□[fh,Å,Í vcomwd.386 ,ð’Ê,μ,Ä DOS ,ìff□[f^,ðŽæ,è□ž,Ü,·□B
,Ü,½□AComWin ,©,ç DOS ,Ö,ÍfNfŠfbf{□[fh,ð’Ê,μ,Ä
ff□[f^,ð’—,è,Ü,·□B
command.com ,ª“®,,±,Æ,ðŠm”F,μ,Ä,ç,Ü,·,ª□A
‘S,Ä,ìfP□[fX,Å^À’è“®□ì,·,é,±,Æ,Í•Û□Ø□o—^,Ü,¹,ñ□B

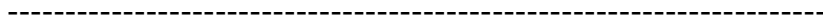
4.DOS “ü□o—í”~Šú (File) (Windows95, WindowsNT ,ì,Ý)

DOS fRf}f“fh,Æ“ü□o—í,ì”~Šú,ðŽæ,éf,□[fh,Å,·□B
,±,ìf,□[fh,Å,Í Win32API ,ìftf@fCf<fnf“fhf<,ð%oî,μ,Ä□A
□efvf□fZfX,ÆŽqfvf□fZfX,ªff□[f^,ì,â,èŽæ,è,ð□s,ç,Ü,·□B
,Ü,½□A98ŒnWindows95 DOS‘<□ã,Å Win32fRf“f\□[f<fAfvfŠ,ª
^ê”Ê•ÛŒè^á”½,·,é,Æ,ç,±-â’è,ð”ð,¯,é,±,Æ,ª,Å,«,Ü,·□B

Windows95 □ã,ÅDOSfRf}f“fh,É’î,μ,Ä“ü—í,ð□s,±□ê□‡□A
comwin.ini (or comwin32.ini) [etc] ,É DOSPasteCommand = 0xE001

,Æ

<L□q,μ,Ä,,¾,³,ç□B



(5) ANSI fGfXfP□[fvfV□[fPf“fX,ªŽg—p%oÅ”\

ŽŸ,ì•¶Žš—ñ,ð ComWin’<,É“ü—í,·,é,±,Æ,Å%oæ-Ê□\$Œä,ª,Å,«,Ü,·□B
ESC•¶Žš,Í ComWin ,ìfRf}f“fhf%ofCf“,©,ç,Í□uCtrl+[□v,Å“ü—í,Å,«,Ü,·□B
‘¼,ìfGfffBf^□[“™ ,Å,Í,»,ì,ç,ìf}fjf...fAfv<,É,μ,½,ª,Á,Ä,,¾,³,ç□B
echo fRf}f“fh,â□AFputs API “™ ,ðŽg—p,μ,ÄŽŸ,ì•¶Žš—ñ,ð ComWin ,É
□o—í,·,é,Æ—l□X,È%oæ-Ê□\$Œä,ª,Å,«,Ü,·□B

- ESC [pl;pcH fJ□[fvf<,ð(pc,pl)^Ê’u,É^Ú“®
- ESC [pl;pcf fJ□[fvf<,ð(pc,pl)^Ê’u,É^Ú“®
- ESC [pnA fJ□[fvf<,ðpn□sfAfbfv
- ESC [pnB fJ□[fvf<,ðpn□sf_fEf“
- ESC [pnC fJ□[fvf<,ðpn•¶Žš%oE,É^Ú“®
- ESC [pnD fJ□[fvf<,ðpn•¶Žš□¶,É^Ú“®

ESC D fj[]fj<,đ^ê[]s%o°,É^Ú“®
 ESC E %oü[]s
 ESC M fj[]fj<,đ^ê[]s[]ă,É^Ú“®

ESC[0] fj[]fj<^Ê'u,©,ç[]Å[][]s,ì%oE'[,Ü,Å,đfNfŠfA
 ESC[1] []æ“^[]s,ì[]¶'[,©,çfj[]fj<^Ê'u,Ü,Å,đfNfŠfA
 ESC[2] fNfŠfA[]EfxfNfŠ[]f“
 ESC[0K] fj[]fj<^Ê'u,©,ç[]s,ì%oE'[,Ü,Å,đfNfŠfA
 ESC[1K] []s,ì[]¶'[,©,çfj[]fj<^Ê'u,Ü,Å,đfNfŠfA
 ESC[2K] fj[]fj<[]s,ì•¶Žš,đ'S,ÄfNfŠfA
 ESC* fNfŠfA[]EfxfNfŠ[]f“

ESC[ps;...;psm •\Ž!•¶Žš,ì'®[]«,đŽwŽ![]Aps,ì^Ó-;íŽŸ,ì,Æ,“,è
 0 <K'è'l
 7 fŠfo[]fX
 8 fV[]fNfÆfbfg
 30 []•, 40 []•"½"
 31 []Ô, 41 []Ô"½"
 32 —î, 42 —î"½"
 33 %o©, 43 %o©"½"
 34 []Â, 44 []Â"½"
 35 Ž‡, 45 Ž‡"½"
 36 []..., 46 []..."½"
 37 "", 47 """½"

fj[]fj<^Ê'u,ì•ï[]X,đ,Æ,à,È,xfGfXfP[]fvfR[]fh,đŽg—p,·,é[]ê[]‡[]A
 ^È%o°,ì“_É—^Ó,μ,Ä,,¾,¾,ç[]B

echo fRf}f“fh,â Puts API ,đŽg—p,·,é[]ê[]‡[]I'[,É•K,„ \n' ,^t%oÁ,·,é,ì,Å
 fj[]fj<^Ê'u,^ŽŸ,ì[]s,ì[]æ“^,É,È,è,Ü,·[]B
 fj[]fj<^Ê'u,đ•ï[]X,·,éfR[]fh,đ•;[]"[]A^ê,Â,ì•¶Žš—ñ,Æ,μ,Ä'—,é[]ê[]‡
 %oæ-Ê•`%oæ,^[]³,μ,,“,±,È,í,ê,Ü,¹,ñ,ì,Å[]A•;[]"%oñ,É•^,^,Ä'—,Á,Ä,,¾,¾,ç[]B
 ("^[= "ESC" = \x1b' ,Æ,·,é)
 Æë) echo ^[[1;1Habc^[[2;2Hdef
 []³) echo ^[[1;1Habc ; echo ^[[2;2Habc

(6) cshf%ofCfN,È□\‘ç%»fXfNfŠfvg

ComWin ,í□\‘ç%»fvf□fOf%of~f“fO,à%»Á”\,ÈfXfNfŠfvgCE¾CEê,ð
fTf|□[fg,μ,Ä,¨,è□AZÿ,ì“Á’¥,ð—L,μ,Ä,ç,Ü,·□B

1. MS-DOS Ver. 5.XX Š®‘S□ã^ÊCEÝŠ·,È,ì,Å□K“¾ŽžŠÔ,ð‘Z□k,Å,«,,é□B
2. csh ,É‘¶□Ý,·,é□§CEä•¶,É‘Š“-·,·,é,à,ì,ª,Ù,Ú,»,,ë,Á,Ä,ç,é□B
3. ŠO•”•ï□□A“à•”•ï□”,ì,æ•Ê,ª, ,èfvf□fVfWff□[,ìf,fWf...□[f<%»,,ª%»Á”\□B
4. CE¾CEê,É‘¶□Ý,·,é%»%»ŽŽŽq,ª,Ù,Æ,ñ,ÇŽg—
p,Å,«□A•,“®□-□”“_„à^μ,ì,é□B
5. fŠf_fCfCEfNfg,ðfTf|□[fg,μ□AfXfNfŠfvg,¾,¨,ÁŠÈ‘P,ÈftfBf<f^□[,ª□ì,ê,é□B

ŽQ□Æ fXfNfŠfvgfŠftf@fCEf“fX

(7) Unicode‘í%žfRf“f□[f<(32bit”Å)

ComWin32 ,Å,í Uniocde ,É‘í%ž,μ,½ftfBf<f^□[<@”\,ð’ñ<ÿ,μ,Ü,·□B
EXPORTS ŠÖ□” cwFputsW ,Æ cwFgetsW ,ð—~—p,·,é,±,Æ,Å
Unicode fefLfXfgftf@fCf<,ð^μ,±,±,Æ,ª,Å,«,Ü,·□B
(‘□^Ó)

UI ,ì□§-ñ,©,ç□A“ü—íŽž,Æ□o—íŽž,íŠef□□[fjf<ŠÂ<<,ì•¶Žš—ñ,É
•ïŠ·,ª,ê,Ü,·,ª□A“à•”ff□[f^,í Unicode ,È,ì,Å□A

fŠf_fCfCEfNfg□AfpfCfvŽž,É Unicode □î•ñ,ªCE‡—Ž,·,é,±,Æ,í, ,è,Ü,¹,ñ□B

(—á) □s”Ô□t,ð,Å,¨,éftfBf<f^□[

```
INT FAR PASCAL WinMain(HINSTANCE hInstance,  
                        HINSTANCE hPrevInstance,  
                        LPSTR lpszCmdParam,  
                        INT nCmdShow)
```

```
{  
    wchar_t wszIn[0x100];  
    wchar_t wszOut[0x110];
```

```
INT nl;

nl = 0;
while (cwFgetsW(wszIn, 0x100, NULL) != NULL) {
    nl++;
    swprintf(wszOut, "%8d:%s", nl, wszIn);
    cwFputsW(wszOut);
}
return 0;
}
```

6. <Z p ú x A s È Ž - €

(1) Šj" • û j

(2) " ® ì Š Â < «

(3) OS/2 ANT Š Â < «, Å Ž g — p Ž ž, ì ' ^ Ó

(4) • K — v, È f t f @ f C f < \ \ —

(5) f R f } f " f h, ì — D æ ì † Ê A E X C E L 4, a • s ' 2, ì Ž ž

(6) f X f N f [f < Ž ž, ì • \ Ž ! —, ê

(7) " ú - { È ê ^ —

(8) ComWin , ì • j " < N " ®

(9) f t f H f A f O f % o f E f " f h < N " ® , Æ f o f b f N f O f % o f E f " f h < N " ®

(10) f f f B f C f N f g f Š f Z f p f C f [f ^ \ u \ v \ u / v

(11) NetWare ã, Å, ì p f X Š Ç —

(12) j È ä, ì - Ú • W

(1) Šj" • û j

ComWin , ì Ž ž, ì • û j, È Š î, Å, ç, Ä Š j " , ³, ê, Ä, ç, Ü, • B

(a) MS-Windows 3.1 È ã, a " ® ì, •, é, à, Á, Æ, à " ñ — í, È f } f v f " , Å, à A
, » , ± , » , ± Ž g , ! , é B
, ± , ê, ì Ž Ž Ò, ì Š j " Š Â < «, a " C x 4 8 6 S L C 1 6 M H z + C f o f X — p ' Y f f , f Š 6 M "
, Æ, ç, x " _ , © , ç, à Ž © M, ð, à, Á, Ä, ç, !, Ü, • B

(b) ComWin Š Â < «, ð Ž g — p, •, é, ½, ß, É " Æ Ž © , ì f < [f < , ð % ö Ÿ, µ • t, •, È, ç B
ComWin Š Â < «, ð Ž g — p, •, é, ½, ß, É, í A
, Å, «, é, ¾, • DOS, UNIX, (È ê †, É, æ, Á, Ä NT, OS/2) , ì f R f } f " f h, ¾, •, Å
% o ^ — p, Å, «, é, æ, x, É, µ, Ü, • B

(c) % o ß < Ž, ì ComWin f v f X f e f € , Æ, ì È Ý Š • < , ð d Ž < , •, é B
V < @ " \ , ð • t, • % o Á, ! , é, ½, Ñ, É A " a , ð " Y, Ü, ¹, Ä, ç, Ü, • B
T d, É Ž d — í, ð È ^ , ß, Ä, ç, Ü, •, a A, ½, Ü, É Ž , " s, à , è, Ü, •, ì, Å A
, ² — ¹ ³, , ¾, ³, ç B

(2) "®"ŠÂ<<

ComWin ,Í MS-Windows 3.1 ^È%º,ŠÂ<< fGf"fnf"fxfgf,[]fh,Å"®"ì,µ,Û,·B

^È%º,ŠÂ<<,Å,ÍŽŸ,ì[]\$EÀ,ª, ,è,Û,·B
MS-Windows 3.1 fXf^f"f_[]fhf,[]fh
DOS fRf}f"fh,ªŽg—p,Å,«,Û,¹,ñB
MS-Windows 3.0
commdlg.dll ,ª•K—v,Å,·B
'Ê[]M<@"\,ÍŽg—p,Å,«,Û,¹,ñB

(3) OS/2[]ANT ŠÂ<<,ÅŽg—pŽž,ì'^Ó

ComWin ,Í Windows ,ì•W[]€API[]ADOS,ì•W[]€fVfXfef€fR[]f<,µ,©
Žg—p,µ,Ä,ç,Û,¹,ñ,ì,Å[]AOS/2 ,â NT []ã,Å,à"®,«,Û,·B

,½,¾,µ^È%º,ì"_,É'^Ó,µ,Ä,,¾,³,çB

DOSfRf}f"fh,ÍfVfXfef€fR[]f<,ì%ºđŽB,ª OS/2 ,â NT ,Æ DOS ,Å
^Û,È,Á,Ä,¨,è[]Acomwld.pif ,Å<N"®,µ,È,ç[]ê[]‡,ª, ,è,Û,·B
,±,ì[]ê[]‡[]Acommand.com ,Æ"ü—Í,µ,Ä,,¾,³,çB(16bit,32bit"Å)

FATftf@fCf<fVfXfef€^ÈŠO,Å,Í"®"ì,ì•Û[]Ø,³,è,Û,¹,ñB(16bit"Å)

OS/2 Warp []ã,ì Win32s ,ÅfVfFf<,đEë"FŽ¯,·,é[]ê[]‡,Í
comwin.ini(or comwin32.ini) ,ì [etc] ^È%º,É
shell=0
,Æ<L[]q,µ,Ä,,¾,³,çB(16bit,32bit"Å)

NT3.51 []ã,ÅŠÂ<<•ï"CEp[]³<@"\,đŽg—p%ºÅ"\,É,µ,Ä,ç,é[]ê[]‡[]A
PIF fGfffBf^[][,É,æ,é DOS fRf}f"fh,ìŽÀ[]s,ÉŽ,¨s,·,é[]ê[]‡,ª

, ,è,Ü,·□B(32bit"Å)

ComWin ,Í Ver 1.80J ,æ,è OS/2 □ANT,Å,à"®□ì,·,é,æ,æ,É
ŠJ" ,μ,Ä,ç,—\`è,È,ì,Å□A"®□ìŠm"F□î•ñ,ª, ,é,Íf□□[f<,μ,Ä
,,¾,¾,¾,é,Æ□K,ç,Å,·□B

ŽQ□Æ fRf}f"fh,ì—D□æ□±^Ê (command ,Æ command.com ,ì^á,ç)



(4) •K—v,Èftf@fCf<□□□

comwinx.exe, comwld.exe, comwld.pif,
vcomwd.386, comwin.dll, comwin.hlp,
comwins.dll, comwreg.exe

,đŠeŽ©,ì

Windows fffBfÇEfNfgfŠ

Windows fVfXfef€fffBfÇEfNfgfŠ

ŠÅ<<•İ□",ì PATH ,ÅŽw'è,¾,¾,½fffBfÇEfNfgfŠ

,ÉfZfbfg,Å'u,ç,Ä,,¾,¾,¾,ç□B

,» ,ê^ÈŠO,ì□ê□±,í□³□í,É"® ,© ,È,ç□ê□±,à, ,è,Ü,·□B

(comwld.pif ,ì'ã,í,è,É comwinx.pif ,đŽg—p,μ,Ä

"^êfffBfÇEfNfgfŠ,É'u, ,ÍfpfX,ª,È,,Ä,à□³□í,É%o^—p,Å,« ,Ü,·,ª□A

shell,Æ,μ,Ä—~—p,·,é□ê□±,ÍfpfX,ª•K—v,Å,·□B)

comwreg.exe ,Íft□[fU□["o~^—p,ìf,fWf...□[f<,Å,·□B

"o~^ ,ªŠ®—¹,·,é,î•s—v,Å,·□B

^È%oº,ìftf@fCf<,ª,È,,Ä,à"® ,« ,Ü,·,ª'å•□,É<@"\f_fEf" ,μ,Ü,·□B

comwld.pif --- DOSfRf}f"fh,ªŽg,ì,Ü,¹,ñ□B(command.com ,¾,¾, ,íŽg—p

%oÅ)

comwin.hlp --- flf"f%ofCf"fwf<fv,ªŽg,ì,Ü,¹,ñ□B

comwins.dll --- "à•"fRf}f"fh,ªŽg,ì,Ü,¹,ñ□B(exit, cls, help "™ ,íŽg—p

%oÅ)

comwreg.exe --- "o~^ft□[fU□[,É,í•s—v,Å,·□B

comwinx.exe ,Æ comwin.dll ,ì2,Â,ìftf@fCf<,Å,à
fGf%o[]f[]fbfZ[]fW,ð-³Ž<,μ,Ä<N“ ®,μ□A%o^—p,·,é,±,Æ,ª,Å,«,Ü,·□B
,±,ê,ª ComWin fVfXfef€ ,ì□Å□□□□¬,Å,·□B

(5) fRf}f“fh,ì—D□æ□#^Ê□AEXCEL4,ª•s'²,ìŽž

ComWin ,íLfff%ofNf^ŽwÆüfRf}f“fhfVfFf<,Æ,ç,æ□<Ši□ã□A
•¶Žš—ñ,ðfvf[]fOf%of€<N“ ®,ÉÆ<,Ñ•t,¯,é,½,β,É□A
,³,Ü,´,Ü,È□^—□,ð,μ,Ä,ç,Ü,·□B

□^—□ŠT—v

1. •¶Žš—ñ,ð comwin.ini [Alias] ,Æ”äŠr,μfGfCfŠfAfX,ì“WŠJ□B
2. f}f<f`fXfe[]f[]fgf[]f“fg,ì%oðŽš□B
3. fAfvfŠfP[]fVf#f“ ,Æ,ìŠÖ~A•t,¯<N“ ® “WŠJ□B
4. fRf}f“fhDLL ,ì□^—□□B(comwins.dll “™ comwin.ini [CommandDII])
5. “à•”fRf}f“fh,ì□^—□□B(comwinx.exe ,ì-,,,β,±,ÝfRf}f“fh)
6. ŠO•”fRf}f“fh,ì□^—□□B(DOS ,ì<K-ñ,É,μ,½,ª,æ□j
Windows fvf[]fOf%of€ ,ð<N“ ® □B
DOS fvf[]fOf%of€ ,ð<N“ ® □B
ComWin —pf[]fbf`ftf@fCf<,ì□^—□□B

ComWin ,í□ADOS, Win, Win32s, ComWin—pf[]fbf`ftf@fCf< ,ìŠefvf[]fOf
%of€ ,ð

Ž©“®”»•Ê,μ“K□Ø,ÈŠÂ«« ,Å<N“ ® ,·,é,æ,æ,É,μ,Ä,ç,Ü,·,ª□A
—\ªŠO,ìŠÂ«« ,Å<N“ ® ,ÉŽ ,”s,·,é□ê□# ,ð□|—¶,μ,Ä□A
"command.com", "win" ,Æ,ç,æ•¶Žš—ñ,ð“Á•Ê^μ,ç,É,μ,Ä,ç,Ü,·□B

(a) <□\$“I,ÉDOSfvf[]fOf%of€ ,ð<N“ ® ,·,é•û-@ (command ,Æ command.com
,ì^á,ç)

command ,Æ“ü—í,μ,½□ê□#□B

‘Ê□í,ìDOSfvf[]fOf%of€ ,Æ”»è,μ□Acomwld.pif ,ð—p,ç,Ä□A
comwld.exe ,ìŽqfvf[]fZfX,Æ,μ,Ä<N“ ® ,³,ê,Ü,·□B

,μ,½,ª,Á,Ä□□I—¹Žž,É"Press any key",Æ,ç,¤•¶Žš—ñ,ª
•\Ž!,³,ê^êŽž'âŽ~ ,μ,Ü,·□B

command.com ,Æ"ü—Í,μ,½□ê□#□B
fvf□fOf%of€"»•Êf<□[f`f" ,đ'Ê,ç, ,¼□Ú command.com
,đ<N"® ,μ,Ü,·□B
command ,Á<N"® ,·,é,æ,è,àf□f,fŠ,đ'½,Žg—p,Á,« ,Ü,·□B
,½,¾,μ□A□I—¹Žž,ì^êŽž'âŽ~<@"\,Í, ,è,Ü,¹,ñ□B

(b) <□\$"I,ÉWindowsfvf□fOf%of€ ,đ<N"® ,·,é•û-@ (win)

win fRf}f"f h,đŽg—p,·,ê,î□AŠO•"fRf}f"f h"»•Ê,đ,¨,±,È,í, ,É□A
•¶Žš—ñ,đ,» ,ì,Ü,Ü□A WinExec, LoadModule API ,É,í,½,μ,Ü,·□B
EXCEL4,đ,²—~ —p,ì•û,Í win fRf}f"f h,đŽg—p,μ,Ä,¾,³,ç□B

—á c:\>win excel

(6) fXfNf□□[f<Žž,ì•\Ž!—□,ê

ComWin ,Á,ÍfXfNf□□[f<,đ□, '—%» ,·,é,½,ß,É
□Ä•`%»æ□^—□,đŠÈ€% ,É,μ,Ä,ç,Ü,·□B
,» ,ì,½,ßf_c fA f□fO"™ ,ì" w€ã,ÁfXfNf□□[f<,ª□s,í,ê,½□ê□#□A
•\Ž!,ª—□,ê,é□ê□# ,ª ,è,Ü,·□B
,±,ê,Í'P,É•\Ž!,ª—□,ê,Ä,ç,é,¾,°,Á
"à•" ,ìff□[f^"j%»ó"™ fVfXfef€fNf%ofbfVf...,ì€´^ö,É,Í,È,è,Ü,¹,ñ□B

•\Ž!,ì—□,ê,đ%»đ□Á,·,é,½,ß,É,Í□A
□Ä•`%»æ□^—□,đ^Ó□} "I,É,¨,±,È,Á,Ä,¾,³,ç□B

—á

[ESC] ,đ 2%»ñ%»Ÿ,·□B
fAfCfRf"%» ,μ•œ€³,μ,È,¨,·□B
'¼,ìfEfBf"f hfE,Á%»B,μ,½€ã□A□o€» ,³,¹,é□B

,Ü,½□A□^—□fXfs□[fh,ð<]□μ,É,·,é,±,Æ,Å
,Ç,ì,æ,κ,È□ê□Š,ÅfXfNf□□[f<,ª□s,í,ê,Ä,à
•\Ž|,ª—□,ê,È,çf,□[fh,à"ö,¡,Ä," ,è,Ü,·□B
(environment f□ffj...□[,ì "complete redraw")
VGA or EGC + 386CPU 'ö"x,Å,Í•\Ž|,ª,à,½,Å,«,Ü,·,ª□A
□,'¬GA + Peintium Žg—p,ìft□[fU□[,í
,±,ìf,□[fh,ð•W□€É,μ,Ä%o^—p,μ,Ä,à%oö"K,³,í,» ,±,È,í,ê,Ü,¹,ñ□B

(7) "ú- {CEê□^—□

ComWin ,í2fofCfjgR□[fhCE—,É<κ'Ê,·,éf□fWfbfN,Å
□^—□,ð□s,Å,Ä,ç,Ü,·,ì,Å□A"ú- {CEê,í^μ,¡,Ü,·□B

(8) ComWin ,ì•j□" <N" ®

ComWin,ð•j□" <N" ® ,μ,Ä,à□³□í,É" ®□ì,·,é,æ,κ,É□ÝCEv,³,ê,Ä,ç,Ü,·,ª□A
^È%oº,ì□§CEÀŽ—□€,ª, ,è,Ü,·□B

ComWin —p,ìŠO•"fRf}f"fh,ðŽÀ□s,μ,½□ê□#□A□Å□%o,ÉPuts, Gets "™ ,ì
ComWin ,ì EXPORT ŠÖ□" ,ªCEÄ,í,ê,½ŽŽ" _ ,Å^ê"ÔfAfNfefBfu□ó'Ô,É
<ß,ç ComWin ,ìfNf%ofCfAf"fg—ì^æ,É□o—í,³,ê,æ,κ,É,È,Å,Ä,ç,Ü,·□B
,Ü,ê,É^Ó□} ,μ,Ä,ç,È,çfNf%ofCfAf"fg—ì^æ,É□o—í,³,ê,é%oÅ"\
□«,ª, ,è,Ü,·□B

,½,¾□A'Ê□í,ìŽg—p□ó<μ,Å,í"□¶,·,é,±,Æ,í, ,è,Ü,¹,ñ□B
fvfXfef€fNf%ofbfVf... ,ìCE'ö,Æ,í-³%o□,Å,·□B

,Ü,½fofbfNfOf%ofEf"fh,Å ComWin —p,ìŠO•"fRf}f"fh,ªŽÀ□s,³,ê,Ä
,ç,é□ê□#f}fEfXfCxf"fg,ª□³□í,É" FŽ~ ,Å,« ,È,ç□ê□# ,ª, ,è,Ü,·,ì,Å□A
fL□[f{□[fh,ÅfCxf"fg,ð"□¶,³,¹,Ä,Ý,Ä,,¾,¾,ç□B

"à•"fRf}f"fh,ÉŠÖ,μ,Ä,í^È□ã,ì,æ,κ,È□§CEÀ,í,È,
□³□í,Éf}f<f^fXfN,Å" ®□ì,μ,Ü,·□B

iŽŽ,μ,É•i, ComWin ,đ<N“® ,μ
 “~Žž,É dir fRf}f“fh,đŽÀs,μ,Ä,à³í,É“®ì,μ,Ü,·B
 ^ÓŠO,È,±,Æ,É Windows ,ìVfXfef€fR[f<fGf~f...f€[fVf#f“ ,í
 Ä“ü^—t,à³,μ,“®ì,μ,Ä,ç,é,±,Æ,ª,í,©,è,Ü,·Bj

(9) ftfHfAfOf%ofEf“fh<N“® ,ÆfofbfNfOf%ofEf“fh<N“®

f}f<f`f^fXfNfVfXfef€ ,Ä,íAftfHfAfOf%ofEf“fh^—,Æ
 fofbfNfOf%of“fh^—,ì<æ•É,ªd—v,É,È,Á,Ä,«,Ü,·B
 (,μ€ê•¾,ª, ,è,Ü,·ªA
 ftfHfAfOf%ofEf“fh^— = '¼—ñ^—
 fofbfNfOf%ofEf“fh^— = •Ä—ñ^—
 ,Æl,í,Ä,¾,ª,çB
 —á,í,îADOS ,Ä,íftfHfAfOf%of“fh^—,ªŽâ'ì,Ä,·,μA
 Windows ,Ä,ífofbfNfOf%ofEf“fh^—,ªŽâ'ì,Ä,·B)

ComWin ,Æ¼,ìVfXfef€,ì<N“® ,ì<æ•É,đ—ñ<“ ,μ,Ü,·B

UNIX

```

$ cc hello.c <--- ftfHfAfOf%ofEf“fh<N“®
$ cc hello.c & <--- fofbfNfOf%ofEf“fh<N“®
  
```

OS/2 or NT

```

[c:\]notepad readme.txt <--- ftfHfAfOf%ofEf“fh<N“®
[c:\]start notepad readme.txt <--- fofbfNfOf%ofEf“fh<N“®
  
```

ComWin

```

c:\>notepad readme.txt ;fg <--- ftfHfAfOf%ofEf“fh<N“®
c:\>notepad readme.txt <--- fofbfNfOf%ofEf“fh<N“®
  
```

(ŽQI)

Windows95 or ComWin

```

c:\>start /wait notepad readme.txt <--- ftfHfAfOf%ofEf“fh<N“®
c:\>notepad readme.txt <--- fofbfNfOf%ofEf“fh<N“®
  
```

UNIX, OS/2, NT ,Á,ÍftfHfAfOf%of“fh<N“ ®,ǎffftfHf<fg,É,È,Á,Ä,ç,Û,·,ª□A
ComWin ,Á,ÍfofbfNfOf%ofEf“fh<N“ ®,ðffftfHf<fg,É,µ,Ä,ç,Û,·□B
—□—R

(a) WindowŠÂ««,Á,Í

Žqfvf□fZfX,Æ,µ,Ä<N“ ®,µ,½f^fXfN,ðŠÇ—□,·,é,½,ß,É
ŠÄŽ<f<□[f`f“,ð•K—v,Æ,·,é,ì,Á□AftfHfAfOf%ofEf“fh<N“ ®□ó’Ô,Á,Í
fvfXfef€„İfpftfH□[f}f“fX,ª’á%oª,·,é□B

(b) ftfHfAfOf%ofEf“fh<N“ ®,ª•K—v,É,È,Á,Ä,,é,ì,Í□A

fofbf`□^—□□AftfBf<f^□^—□“™,ÉÇÈ,ç,ê,é□B

(c) ComWin ver 1.40 ,Û,Á,İfvfXfef€,Æ,ÌÇÝŠ·□«„ð,Æ,é□B

(d) Windows95 ,àfofbfNfOf%ofEf“fh,ǎffftfHf<fg,Á, ,é□B

,æ,Á,ÄfofbfNfOf%ofEf“fh<N“ ®,ðffftfHf<fg,É,µ,½•û,ª□A
ft□[fUfrfŠfefB,É—D,ê□ACEÝŠ·□«„àŽæ,ê,é,Æ”»’f,µ,Û,µ,½□B

□i,±,ì^µ,ç,É,í^Û~_„ì, ,é,©,½,à^½,ç,ÆŽv,ç,Û,·,ª□Aft□[fUfrfŠfefB,ì“_□A
%oß<Ž,Æ,ÌÇÝŠ·□«„ì“_„Á,±,ì•û-@,É,µ,Û,µ,½□B,²—¹□³,,¾,³,ç□B
,à,ç,ë,ñ□A”½~_f□□[f<,à,n,j,Á,·□B)

fofbfNfOf%ofEf“fh<N“ ®,ðffftfHf<fg,É,·,é□ê□#□A
Çè’€□ì,Á“~„İftf@fCf<,É“~ŽžfAfNfZfX,·,éŠèÇ~□«„ª
ftfHfAfOf%ofEf“fh<N“ ®,ðffftfHf<fg,É,µ,Ä,ç,éfvfXfef€,æ,è’□,µ,Û,·□B
fofbf`□^—□□AftfBf<f^□^—□,ð^½—p,·,é,©,½,Í□A
, ,ç,©,İ,ß DOS □ă,Á SHARE.EXE ,ð□í““ ,³,¹,é,±,Æ,ð,“Š©,ß,µ,Û,·□B

(10) fffBfÇefNfgfŠfZfpfÇ□[f^□u\□v□u□v

ComWin ,İfffBfÇefNfgfŠfZfpfÇ□[f^□u/□v,É□\$ÇÈÀ,Â,«„È,ª,ç’í
%ož,µ,Û,µ,½□B
ftf@fCf<-¼•âŠ®<@“\,Æ“à•”fRf}f“fh,ª’í%ož•”•ª,Á,·□B
,½,¾,µ□A’¼,ì WindowsfAfvfŠ,â DOS fRf}f“fh,É,í’í%ož,µ,Ä,ç,Û,¹,ñ□B
ComWin ,í DOS □ă,É□\’z,³,ê,½ Windows □ă,İ\ftfg,È,ì,Á□A
DOS•İ%o»„©,ç □u/□vİfvfVf#f“ ,ð’Ç•ú,µ,È,çÇÈÀ,è

ComWin ,¾, ¯, Å%øðĈ^ ,·, é, ±, Æ, Í·s%øÅ" \,¾, Æ, ç, x, ±, Æ, à□|—¶,,¾,³, ç□B

(11) NetWare □ã, Å, ìfpjXŠÇ—□

NetWare ,ðŽg—p, μ, Ä, ç, éŠÂ««, Å
fffBfĈfNfgfŠfZfpfĈ□[f^ ,ð□u/□v, É, μ, ½□ó'Ô, ÅĈë'€□ì, ð□s, x, Æ
^Ù□í, É□^—□ŽšŠÔ, ¢, ©, ©, é□ê□#, ¢, , è, Ü, ·□B
Ĉ'^ö, Í·s-¾, Å, ·, ¢□ANetWare ,ìfvfXfef€fR□[f<"à, Å□A
flfbfgf□□[fNf}fVf"-¼, ðĈÿ□ð, ·, é, ½, ß,¾, Æ□l, l, ç, ê, Ü, ·□B

(12) □iĈë, ì-Ú·W

ŽŸ, ì3" _ , É, Å, ç, ÅŠg'£, ·, é("w—Í, ·, x, «)—\ 'è, Å, ·□B

(a) ft□[fU□[fCf"f^□[ftfF□[fX
fRf"f□[f<, ì□s□"□AĈ...□", ðŽ©—R, É·ï□X, μ, ½, è□A
fqfXfgfŠ□[l, ì<L%ø"□", ð·ï□X, Å, «, é, æ, x, É, μ, ½, ç, Å, ·, È□B
, Ü, ½fRf}f"fhf%øfCf"f, □[fh, Å, ì"í^í'í'ð, à%øÚ'è, Å, ·□B

(b) fEfBf"fhfE□\$ĈäfRf}f"fH
csh , É'S"—, ·, éfXfNfŠfvfg, àŠ®□¬, μ, ½, ì, Å□A
SendKey "™ , ìfEfBf"fhfE, ð□\$Ĉä, ·, éfRf}f"fH, ð□®"ð, ·, é, Ì□A
fEfBf"fhfE'€□ì, ¢Ž©"®%ø», Å, «, é, ÆŽv, ç, Ü, ·□B

(c) flfbfgf□□[fN
ft□[fU□[fCf"f^□[ftfF□[fX, ð'ñ<Ÿ, ·, éf\ftfg, Æ, μ, Ä
□iĈë, ìflfbfgf□□[fN, ð□v'¬, É—~—p, Å, «, é, ±, Æ, ð
-Ú·W, ÉŠJ", μ, ½, ç, ÆŽv, ç, Ü, ·□B

ComWin fVfXfef€, Í□_ "î□«, ð'æ^ê, Æ, μ, Ä, ç, Ü, ·□B
ft□[fU□[Ž©□g, à, Ç, ñ, Ç, ñ<@" \, ðŠg'£, μ, Ä,¾,³, ç□B

7. %ü'ù—š—đ

ComWin Ver. 3.51 97/03/15

ftf@fCf%o[fvf[f“fvfg<@”\
fAfvfšfjff...[<@”\
f

ComWin Ver. 3.50 97/03/01

ŠÈ^Öftf@fCf%o[fEfBf“fhfE
KeyboardLayout, clip, paste fRf}f“fh•W□€‘•”ö
term fRf}f“fh,ª TELNET ,É‘î%ož
fRf}f“fhf%ofCf“f,□[fh,Å,àf□jff...□[Žg—p%oÂ

ComWin Ver. 3.40 96/12/05

Unicode ftfBf<f^□[<@”\
ŠÜ<ó”ftf@fCf<-¼‘î%ož (32bit)
fofOftfBfbfNfX
fqfXfgfŠ,ì•s<i□‡

ComWin Ver. 3.32 96/10/10

fXfNfšfvfgfffofbfO<@”\
fqfXfgfŠ•âš®<@”\
DOSfRf}f“fh,ì<N“®f,□[fhŽw’è
šefRf}f“fh,É /? flfvfVf‡f“‘Ç%oÁ
j□[f<^Ú“® ,ª2fofCfgr□[fh,É‘î%ož
pushd fRf}f“fh,É UNIX ĆÉŠ·<@”\
f

ComWin Ver. 3.30 96/09/05

‘Ê□M<@”\
%opĀÊšÂ««,Å,ì•Ž!•ö,ê,đ□Å□—ĀÈ,É□C□³
install.bat ,ì•s<i□‡%ođ□Á(32bit)

ComWin Ver. 3.22 96/08/20

Unicode—pAPI cwFputsW(32bit)
‘Ê□MfT□[fo□[<@”\
‘[—<@”\
f

```
fofOftfBfbfNfX
fvfXfef€ŠÂ««•ï□”,ª□³,µ,ŽQ□Æ,Å,«,È,¢
```

ComWin Ver. 3.20 96/07/20

```
'Ê□M<@”\fTf|□[fg
fhf%ofbfO□•fhf□fbfv,Åftf@fCf<-¼“ü—Í%oÅ
```

ComWin Ver. 3.10 96/06/01

```
fRf}f“fhDLL,đ“®“lf□□[fh%oÅ”\
ftf@f“fNfVf#f“fL□[8CEÂ•\Ž!%oÅ”\
printfRf}f“fh,ì□‘Ž®,É•s“®□-□”“_
fofOftfBfbfNfX
“o~^fvf□fOf%of€,lfofO
ftf@fCf<-¼•âŠ®,ìf□[fg
```

ComWin Ver. 3.04 96/05/01

```
printf fRf}f“fh,đ“à•”fRf}f“fh%o»
<ó””,đŠÜ,bftf@fCf<-¼,à•âŠ®%oÅ”\
fofOftfBfbfNfX
for □$CEäfRf}f“fh
ftfHf<f_□[<N“®
```

ComWin Ver. 3.02 96/04/05

```
cwsh ,É□sCE...•ï□X<@”\ (Win95, NT)
printf fRf}f“fh’Ç%oÁ
for, gosub □$CEäfRf}f“fh’Ç%oÁ
□u&□v□u$□v□u:□v%o%oŽŽŽqfTf|□[fg
fofOftfBfbfNfX
switch □$CEäfRf}f“fh
```

ComWin Ver. 3.01 96/03/20

```
32bit□í“fvfFf<□ucwsh□v“o□ê (Win95, NT)
fXfNfŠfvg%o%oŽŽŽq,É□u*□v(f|fCf“f^),đ’Ç%oÁ
fXfNfŠfvg“à,Å16□i□”Žg—p%oÅ”\
foreach fRf}f“fhfTf|□[fg
```

ComWin Ver. 3.00 96/03/01

BATŠ®'S□ã^ÊĈŸŠ·□Acsh'Š"-,lfXfNfŠšvfg'•"ö
fqfXfgfŠšfofbftf@□AfRf"f□[f<Ĉ...□",đ•ï□X%oôĀ"\
BAT—pfRf}f"f"fh for, let, test fTf|□[fg
fofbfOftfBfbfNfX
fg fRf}f"f"fh (WinNT3.51)
Šg'£fRf"f□[f< (Win95)

ComWin Ver. 2.90 96/02/10

fVf#□[fgfjfbfgftf@fCf<(.lnk)'î%ož (Win95)
fffBfĈfNfgfŠ-¼"ü—í,ÅftfHf<f_□[<N"® (Win95)
fVfFf<f%ofbfp□[(#!)'î%ož
ŠÖ~A•t, ¯, ì-{-½ ShellExecute fRf}f"f"fhfTf|□[fg
fRf}f"f"fh-¼•âš®),šg□[(.exe .com .bat .pif .cws .lnk ĈŸ□ö)
Š¿Žš,lfCf"f%ofCf""ü—í%oôĀ"\
"wĈi□F,ãftf<fj%o□[.É'î%ož
fofbf`ftf@fCf<"à,Å□u@□v,ãŽg—p%oôĀ"\
fofOftfBfbfNfX
vol fRf}f"f"fh (Win95)

ComWin Ver. 2.80 96/01/25

"ú%op,Qf-□'ĈéŸ,□[fhfTf|□[fg
fRf}f"f"fh-¼•âš®<@"\
Šg'£fRf"f□[f< DOS "ü□o—í"~Šú,É2,Â,lf,□[fh
start fRf}f"f"fh,ÉfEfFfCf<@"\
fofOftfBfbfNfX
NetWare □ã,lfnf"fOfAfbfv
ŠÂ<<•ï□"fT□[fo□[
Getch(),Inkey() API ,ì-β,è'l

ComWin Ver. 2.71 96/01/16 (16bit"Å "ñĈöŠJ)

98ĈEn,ì Windows95 ,Å Win32fRf"f□[f<fAfvfš,ì"®□i%oôĀ"vf,□[fh
Win32□ã,ÅŠÂ<<•ï□",đŽqfvf□fZfX,ÉĈp□³%oôĀ"\
fVfFf<,đ-³Ĉø,É,·,é□Y'è,đ'Ĉ%oôĀ
fofOftfBfbfNfX
Getch() API

ComWin Ver. 2.70 95/12/01

```
Šg'£fRf"f[f<,ª Windows 95 ,É'î%ž  
NT Ā,ÅŠg'£fRf"f[f<,lf~f%o[fŠf"fO,ª%oĀ"  
fRf"f{f{fbfNfX,iffBfCefNfgfŠ•Ž|,É,à/' ,ðì—p  
ps fRf}f"f'h,ìo—Í,ÉŽÀ[sftf@fCf<-¼,ð'Ç%oĀ  
fofOftfBfbfNfX  
cd fRf}f"f'h,ì•s³f[fbfZ[fW  
NT 3.51 ,Å,lf[f<fo[f,ì•s<i[  
fofbf`ftf@fCf<"à,ì goto fRf}f"f'h,ì•s<i[  
98CEn,ì Windows ,Å|—¹Žž,ì•s<i[†(vcomwd.386)
```

ComWin Ver. 2.60 95/10/10

```
ftf@fCf<-¼•âš®<@"\,Åf[fCf<fhfj[f'h,ìŽw'è,ª%oĀ"  
f%of`f`ff[f,ìY'è,ÉŽQ[Æ<@"\Ç%oĀ  
mode fRf}f"f'h,ÉŠg'£fRf"f[f<,ð$Œä,·,élfvfVf†f""Ç%oĀ  
%oæ-Ê$ŒäfR[f'h,ì[ŽÀ  
ŠĀ«•Ĭ" ,ìf[f[fO[f[f†f[f[-â'è,ìŒyŒ,  
fofCfifš"üo—Í,ìžè[†,ð<K'è Fwrite(), Fread() API  
fofOftfBfbfNfX  
80•Ŧžš^ÈĀ"ü—Í,μ,½[è[†,ì^è"Ê•ŪŒì^á"½
```

ComWin Ver. 2.52 95/09/05

```
printf [€<'API cwFprintf ftf[f[f  
dir fRf}f"f'h,Éf[fg<@"\Ç%oĀ  
fc[f<fo[f,iffBfCefNfgfŠ•Ž|,ð"Šú  
fofOftfBfbfNfX  
80Œ...-Ú,ì•Ŧžš—Ž,ž  
PATH ŠĀ«•Ĭ" ,ª,È,ç,Æ,«,ì^è"Ê•ŪŒì^á"½  
fffBfCefNfgfŠfZfpfŒ[f^,ì∅,è'Ö,ì•s<i[†
```

ComWin Ver. 2.51 95/08/18

```
fofOftfBfbfNfX  
fRf}f"f'hfZfpfŒ[f^,ìžd—l,ÅPATH,ìY'è,Éžx[á,ª, ,é,ì,ðC³  
Fputs, Fgets ,lfŠf_fCfCefNfg,ª,·,x,Ā•W[€fGf%o[f,É,È,é,ì,ðC³
```


ComWin Ver. 2.50 95/08/10

VxD ,lftf|[]f|g,Å DOS fAfvfš,Æ,ì~ACEg,º%oÅ"\
DOS fAfvfš" ®[]ó'Ô,ì'ðž},ðšg[]
fGfXfP[]f|v|R[]f|h,ì[]®—[],ÅfRf}f"f|f%ofCf",ìž©—R"x,º'[]'à
copyfRf}f"f|h,ìšm"Ff[]fbfZ[]fW,ðfXfLfbfv,·,é<@"\,ð'Ç%oÅ
fofOftfBfbfNfX
DOS ,ìšÅ<<•ì[]",ºfI[]fo[]ftf[][],µ,½,Æ,«,ì^è"Ê•ÛCEì^á"½
"ú-{CEè,ìftf@fCf<-¼,ðžw'è,µ,½,Æ,«,ì•s<i[]†

ComWin Ver. 2.40 95/07/10

fffBfCEfNfgfšfZf|pfCE[]f^[]u/[]v[]ì—p
copyfRf}f"f|h,Éšm"Ff[]fbfZ[]fW
renfRf}f"f|h,ÅfffBfCEfNfgfš-¼•ì[]X
fffBfCEfNfgfš-¼,ðžw'è,·,é,¾,¯,ÅfffBfCEfNfgfš•ì[]X
cwPutenv, cwGetenv API ,ÅšÅ<<•ì[]",ì'€[]ì,º%oÅ"\
GetComWinLong API ,ì<@"\šg'£
[]s--[]A[]s"a,Û,Å,ì^èš†[]í[]œ,º%oÅ"\
fofOftfBfbfNfX
129•¶žš^È[]ã,ì•¶žš—ñ,ð^µ,¤[]ê[]†,ì^è"Ê•ÛCEì^á"½

ComWin Ver. 2.30 95/06/25

ANSIfGfXfP[]f|v|V[]f|P|f"XfTfufZfbfg,ìftf|[]f|g
•\žìf[]fj...[][,É,æ,èfLfffvfVf†f"fo[][,ð[]Á,¹,é
ftf@f"fNfVf†f"fl[][10CEÅ•\žì,º%oÅ"\
•W[]€fGf%o[]["ü[]o—f|,[]f|h,ðftf|[]f|g
Getch(), Inkey() API ,ðftf|[]f|g
SetWindowPos fRf}f"f|h,ð[]V[]Ý
Ctrl+Ins,Shift+Ins,Shift+Del ,Åfjfbfg[]•fy[]fXfg%oÅ"\
fgfRf}f"f|h[]Afofbf`ftf@fCf<žž,É Ctrl+C,Break,STOP,º—LCEø
fc[]f<fo[][,ÉfffBfCEfNfgfš•ì[]X[]^—[]AžžCEv•\žì,ð•t%oÅ
•s<i[]†,ì[]C[]³
fNfšfbfvf{[]f|hšÖCEW
copy,time,date fRf}f"f|h

ComWin Ver. 2.20 95/05/20

ftf@f"fNfVf†f"fl[]f%of"f`ff[][<@"\

```

fRf}f"fhf%ofCf" ,ÅŠÂ«•i" %env% "™ ,ìžw'è%oÂ"\
alias fRf}f"fh,Å^ø" %1 "™ ,ìžw'è%oÂ"\
mode fRf}f"fh,ÅftfHf"fg,ì•iX%oÂ"\
f%ofCf"fGffBfbfgŽž,És"ªAps--,ìfL['€ì%oÂ"\
•s<i,ìC³
    copy, ren fRf}f"fh
    ftf@fCf<-¼•âš@Žž,ì, #A~#,ì—,é
    fofbf`ftf@fCf<"à,ìópsl—¹-â'è
    Cut Žž,ìfSf~•\Ž!

```

ComWin Ver. 2.14 95/04/15

```

32bit%o»fAf_fvf^,ð•W€"Y•t
start fRf}f"fh,ìVÝ
•s<i,ìC³
    80€...,ì•¶Žš—ñ,ðo—í,•,éê#,ì\Ž!,ì—,é

```

ComWin Ver. 2.11 95/03/01

```

•s<i,ìC³
    fAfvfŠfP[fVf#",ìŠÖ~A•t,~N"®
    fhf%ofbfO•fhf[fbfvfT[fO[<@"\
    fc[f<fo[,ì•\Ž!ftfHf"fg
    fofbf`ftf@fCf<"à,ì exit fRf}f"fh

```

ComWin Ver. 2.10 95/02/25

```

Windows 95 f%ofCfN,Èfc[f<fo['•"ö
fRf}f"fhf%ofCf" ,Åfjfbfg&fy[fXfg,ª%oÂ"\
UNIXf%ofCfN,È history fRf}f"fh
fRf"fl[f<<L%o~s",ð500ps,ÉŠg'å
DOSfRf}f"fh,ðComWin'<,ÅŽÀs
•s<i,ìC³(Ctrl+TAB,ì-â'èAOLEŠÖ~A•t,~,ì-â'è"™)

```

ComWin Ver. 2.01 95/01/25

```

fŠf_fCf€fNfgAfpfCfv<@"\,ìfTf[fog
,»,ì¼A•s<i,ìC³

```

ComWin Ver. 2.00 95/01/10

%o0pCEê"Á ComWin "o0ê
MS-DOS 3.XX 0€<'fofbf`fXfNfŠfVfg
ŠÁ<<•i0"ft0[fo0[<@"\
fvf0f"fvfg,ì•i0X%o0Á\
fLfffvVf#f"-¼•i0X<@"\,ì'Ç%o0Á
fLfffvVf#f"-¼Žw'è,ÁfEfBf"fhfE'€0ì%o0Á\
fL0[Š,,è"-,Ä,ì•i0X%o0Á\
fXfNf00[f<<@"\,ìCE©'¼,µ
ftf@fCf<-¼•âŠ@Žž,É0-•ŋŽš•\Ž;0Af0[fg,ì0,'-%o0»
ComWin ,ìfVfFf<"o~^,af}fEfX,Á%o0Á\
DOS,ì"à•"fRf}f"fhftf<ftf|0[fg
,>,ì'¼0A•s<i0# ,ì0C0³

ComWin ver 1.80J 94/11/15

ComWin fVfXfef€,ìŠ@'Sf}f<f`f^fXfN%o0»
fXfNfŠfVfgDLL0AfCf"f^fvfŠf^DLL0ASystem fRf}f"fh,ì0V0Y
del ..*. * "™,ì•s<i0# ,ì0C0³
IME ,â,È,ç0ê0# ,ì SHELL<N" @Žž,ì•s<i0# ,ì0C0³
f}f<f`fXfe0[fgf0f"fg,ì%o0đŽB,ì•s<i0# ,ì0C0³
fofbf`ftf@fCf<^ø0",ì•s<i0# ,ì0C0³

ComWin ver 1.70 94/10/15

'É0Mf|0[fg,É'î%o0ž0Af}f<f`ft0[fU0[ŠÁ<<,đ'ň<Y
ftf@fCf<-¼•âŠ@<@"\
ctl3d.dll ctl3dv2.dll (3-Df_fCfAf0fO) 'î%o0ž
ctty, speed, kill, ps, SendMessage fRf}f"fh,ìfTf|0[fg
Fputs ,ìf}f<f`f%o0fCf"%o0»

ComWin ver 1.60 94/09/23

comwin.dll("ü0o—Í—pDLL),ì<@"\<%o0»
ŠO•"fvf0fZfX,©,ç Gets,Fputs,Fgets,â—~—p%o0Á
Puts ,Á%o0ü0s0ATAB,ì0^—0,â,,"±,È,|,é,æ,æ,É,È,Á,½
exit ,É /p flfvfVf#f""Ç%o0Á
ŠÁ<<•i0" PATH ,â 80•ŋŽš,đ' ,|,é,Æ—Ž,¿,éfofO,ì0C0³
fg, pause ,ì%o0ü—Ç

ComWin ver 1.50 94/09/01

```
frf...[f[f[f,ì'å•<%»
"í'í'í'ðRfs[[A'í'ð•¶Žš—ñ<N"®[A
fhf%ofbfO•fhf[fbfvfT[f[f[<@"\`Ç%Á
<N"®Žž,ìRf}f"fhŽw'èìfvfvf¶f"VY
ComWin —pfofbf`ftf@fCf<,É %1 "™,ì^ø"Žg—p%Á"\
```

ComWin ver 1.41 94/08/16

```
pause fRf}f"fh,ìTf|[fg
ftfHfAfOf%ofEf"fh^—,ìTf|[fg
ftfHfAfOf%ofEf"fh<N"®,ÆfofbfNfOf%ofEf"fh<N"®,ì<æ•Ê,ª%Á"\
```

ComWin ver 1.40 94/08/14

```
f}f<f`fXfe[fgf"fg[Afobf`ftf@fCf<,ìTf|[fg
fAfvfŠfP[fVf¶f",Æ,ìŠÖ~A•t,`<N"®,ìTf|[fg
fvXfef€,ìf}f<f`f^fXfN%»
(^[—^t,ì STOP fL[[AftfH[fjfx,ì∅,è'Ö,ì,ª%Á"\)
"ú-{CEê"ü—í,ì³í%» (^ê•"§CEÀ, ,è)
"à•"fRf}f"fh,ìŠg[ (pushd, popd, dirs, ren, shutdown "™)
fqfXfgfŠ[.ì|—¹Žž•Ú'¶
fCf"fxfg[f%®,ìÇ%Á ('P,È,é DOS ,ìfobf`ftf@fCf<,Å,·B)
```

ComWin ver 1.30 94/08/01

```
alias, unalias fRf}f"fh,ìTf|[fg
reboot, restart fRf}f"fh,ìTf|[fg
fqfXfgfŠ<@"\,ì^À'è%»
flf"f%ofCf"fwf<fv,ì<%»
f[f,fŠí'"—Ê30%íCE,
Win32s fAfvfŠ,ìTf|[fg
```

ComWin ver 1.20 94/07/17

```
DOSfRf}f"fh,ìTf|[fg
fNfŠfbfvf{[fh^—,ì'Ç%Á
fXf^[fgfAfbfv<@"\,ì'Ç%Á
flf"f%ofCf"fwf<fv,ì'Ç%Á
```

ComWin ver 1.10 94/06/20

copy fRf}f“fh,lfTf|[]fg

fRf}f“fh•”,đ ComWin ,©,ç[]Ø,è—£,μ comwins.dll ,đ[]V[]Ý

Puts,ì[]^—[],đ[],‘¬^À’è%»»

fEfBf“fhfE,lfTfCfY•Û‘¶<@“\,ì’Ç%»Á

ComWin ver 1.00 94/06/07

[]%»”Å

8. Žď—l•iX”_

ComWin Ver. 3.40 ,©,ç ComWin Ver. 3.50 ,iŽď—l•iX”_B
fRf}f“fhf%ofCf“f,[]fh,Å,àf[]ff...[][,ªŽg—p%oÅ”\,Å,·B

ComWin Ver. 3.32 ,©,ç ComWin Ver. 3.40 ,iŽď—l•iX”_B
“Á,É, ,è,Û,¹,ñB

ComWin Ver. 3.30 ,©,ç ComWin Ver. 3.32 ,iŽď—l•iX”_B
comwinx.exe ,Æ comwtbar.dll ,đ“[]‡
comwpad.exe ,Æ comwctl.dll ,đ“[]‡(32bit”Å)

ComWin Ver. 3.04 ,©,ç ComWin Ver. 3.30 ,iŽď—l•iX”_B
“Á,É, ,è,Û,¹,ñB

ComWin Ver. 3.02 ,©,ç ComWin Ver. 3.04 ,iŽď—l•iX”_B
printf ,ì^ø,«” ,ì^Ó-; ,ª•iX,É,È,è,Û,μ,½B

ComWin Ver. 3.01 ,©,ç ComWin Ver. 3.02 ,iŽď—l•iX”_B
“Á,É, ,è,Û,¹,ñB

ComWin Ver. 3.00 ,©,ç ComWin Ver. 3.01 ,iŽď—l•iX”_B
Getch(),Inkey(),l-β,è'l,đ 2.80^È[]ăĀÉÝŠ·ĀÈ'èB

ComWin Ver. 2.90 ,©,ç ComWin Ver. 3.00 ,iŽď—l•iX”_B
•\Ž|f_fCfAf[]fO,ÆŠÅ«f_fCfAf[]fO,ì[]€-Ú•iX[]B
fXfNfŠfvgšÖĀW,ìfRf}f“fh,ª'å•[],ÉfŠfjf...[]fAf<[]B
[]Ú[]x,ífXfNfŠfvgšÖĀW,ì[]€-Ú,đŽQ[]Æ,μ,Ä,,¾,³,¢B

ComWin Ver. 2.80 ,©,ç ComWin Ver. 2.90 ,iŽď—l•iX”_B
ftf@fCf<-¼•âŠ®,ìf[]ff...
[][,ª[]u'â•¶Žš,Å•âŠ®[]v,©,ç[]u[]-•¶Žš,Å•âŠ®[]v,É[]A
,R,cf_fCfAf[]fO,ì[]Ý'è,ª[]uŠÅ«[]v,©,ç[]u•\Ž![]v,É•iX[]B

ComWin Ver. 2.71 ,©,ç ComWin Ver. 2.80 ,iŽď—l•iX”_B

Getch(),Inkey() API ,l-β,è'l,ª•ïX,³,ê,Ä,ç,Ü,·B
cwmorfRf}f“fh,É%œ<ç,ª, ,è,Ü,·,ì,ÅAGetch() ,ì€€,đ
ŽQAE,μ,Ä,,¾,³,çB

Šg'£fRf“f\[]f<,lf[]ff...[][,ª•ïX,É,È,è,Ü,μ,½B
,½,¾,μAª—P•û-@,đ•ï,!,½,¾,-,È,ì,ÅA,ç,Ü,Ü,Å,ì<@“\,ÍŽg—p%oÂ“\
,Å,·B

uY'è,ì•Û'¶v[]ff...[][,ìêŠ,đuftf@fCf<v,©,çuflfvfVf#f“v,É•ïXB

“ú%op,Qf-¶Æêf,[]fh,đTf|[]fg,μ,½,±,Æ,É,æ,èA
english.lzh ,Í”pŽ~,,³,ê,Ü,μ,½B

ComWin Ver. 2.70 ,©,ç ComWin Ver. 2.71 ,ìŽd—l•ïX“_B
“Á,É, ,è,Ü,¹,ñB

ComWin Ver. 2.60 ,©,ç ComWin Ver. 2.70 ,ìŽd—l•ïX“_B
Šg'£fRf“f\[]f<,ÉŽáŠ±,ì•ïX,ª, ,è,Ü,·,ªA
“Á,É^ÓŽ~,·,é•K—v,Í, ,è,Ü,¹,ñB

ComWin Ver. 2.52 ,©,ç ComWin Ver. 2.60 ,ìŽd—l•ïX“_B
ft[]fU[]fCf“f^ftfF[]fX,ì•ïX,Í, ,è,Ü,¹,ñ,ªA
ComWin 'í%žftfg,ì[]-@,ÉŽáŠ±,ì•ïX,ª, ,è,Ü,·B

ComWin Ver. 2.51 ,©,ç ComWin Ver. 2.52 ,ìŽd—l•ïX“_B
“Á,É, ,è,Ü,¹,ñB

ComWin Ver. 2.40 ,©,ç ComWin Ver. 2.51 ,ìŽd—l•ïX“_B
fGxfP[]fvfR[]fh,ì®—,É,æ,è
u\$[]v•İŠ·fR[]fh,đ”pŽ~B
DOS fAfvfŠ“®[]ó'Ô,ì'l'đŽ},đŠg[],É,æ,è
•W€ PIF ,đ comwinx.pif ,©,ç comwld.pif ,É•ïXB
[]—^,ì comwxold.pif ,ì<@“\,Í comwld.pif ,ÉEp³B

ComWin Ver. 2.30 ,©,ç ComWin Ver. 2.40 ,ìŽd—l•ïX“_B
dir fRf}f“fh,ìo—lftf@fCf<-¼,đ-•¶Žš•\Ž,É•ïXB

fffBfCEfNfgfŠfZfpfCE[f^□u/□v,đ□ì—p,μ,½,±,Æ,Å
ftf@fCf<-¼•âŠ®<@”\,ÉŽáŠ±,ìŽd—I•ï□X□B

ComWin Ver. 2.20 ,©,ç ComWin Ver. 2.30 ,ìŽd—I•ï□X“_□B
fc□[f<fo□[fRf“f{f{fbfNfX“à,ì<@”\,đ□ufgfbfv□[frf...□[□v,©,ç
□ufffBfCEfNfgfŠ•ï□X□v,É•ï□X□B
fgfbfvfrf...□[<@”\,í□ucomwins□vfT□[frfXfRf}f“fh,É^Ú“®□B

logout fRf}f“fh,ì-¼□ì,đ logoff ,É•ï□X□B
(logout ,đŽg—p,μ,½,ç□ê□‡,í alias ,Å^î%ž,μ,Ä,,¾,¾,ç)

•\Ž!□Ý’èf_fCfAf□fO,đ□V□Ý,μ,½,±,Æ,Å
ŠÂ<<□Ý’èf_fCfAf□fO,ÉŽáŠ±,ì•ï□X, ,è□B

ComWin Ver. 2.14 ,©,ç ComWin Ver. 2.20 ,ìŽd—I•ï□X“_□B
fofbf`ftf@fCf<“à,ÅŽg—p,·,é rem fRf}f“fh,ª□s‘S‘ì,É—LCEø
fc□[f<fo□[“à,ìf{f^f“ ,ì”z’u’Ö,ì
speed fRf}f“fh,đ”pŽ~ ,μ□Amode fRf}f“fh,É<zŽû
ffftfHf<fg,ì□Ý’è,Åfc□[f<fo□[,Æftf@f“fNfVf‡f“fL□[,đ•\Ž!

ComWin Ver. 2.11 ,©,ç ComWin Ver. 2.14 ,ìŽd—I•ï□X“_□B
“Á,É, ,è,Ü,¹,ñ□B

ComWin Ver. 2.10 ,©,ç ComWin Ver. 2.11 ,ìŽd—I•ï□X“_□B
ftf@fCf<-¼•âŠ®Žž,ÉfffBfCEfNfgfŠ,ì□ê□‡ ‘\’ ,đ•t%oÁ

ComWin Ver. 2.01 ,©,ç ComWin Ver. 2.10 ,ìŽd—I•ï□X“_□B
^È‘O,©,ç”á”» ,ì½,©,Á,½ftf@fCf<-¼•âŠ®Žž,ìj□[f<^È‘u,đ
•âŠ®f□□[fh,ì□I’[,É^Ú“® ,μ,Ü,μ,½□B

ComWin Ver. 2.00 ,©,ç ComWin Ver. 2.01 ,ìŽd—I•ï□X“_□B
fvf□f“fvfg,ì•Û‘¶•û-@,đ•ï□X,μ,Ü,μ,½□B
□]—^ ,í prompt fRf}f“fh,đŽÀ□s,·,é,½,Ñ,É□A
prompt •¶Žš—ñ,ª•Û‘¶,³,é,Ä,ç,½,ì,Å,·,ª□A
□ifo□[fWf‡f“ ,©,ç,í-¾Ž!“I,É•Û‘¶,·,é•K—v,ª, ,è,Ü,·□B

ComWin ver 1.80J , ©, ç ComWin Ver. 2.00 , ĺžd—l•ĩX“ _B
ftf@fCf<-¼•âš®<@”\, ð•W□€ , ĺfL□[š,,, è“- , Ä, ð
Shift + UP, Shift + DOWN , ©, ç
Ctrl + UP, Ctrl + DOWN , É•ĩX, µ, Ü, µ, ½□B
, ¾, ½, µ□A fL□[š,,, è“- , Ä, ð•ĩX<@”\, ð
fTf|□[fg, µ, Ü, µ, ½, ð, Å□A“Á, É-â‘è, í, È, ç, ÆŽv, ç, Ü, ·□B
, Ü, ½□A ftf@fCf<-¼•âš® Žž, ð•\Ž!•ŕŽš, æ□-•ŕŽš, É, È, è, Ü, µ, ½□B
(fĲfĲfĲfĲ“ , Å‘â•ŕŽš•\Ž!‰Å)

ComWin ver 1.70 , ©, ç ComWin ver 1.80J , ĺžd—l•ĩX“ _ , í“Á, É, , è, Ü, ½, ð□B

ComWin , æ‘ñ<Ÿ, µ, Ä, ç, é API , ĺ^ø□” , É, í, , , © , È•ĩX, æ , è, Ü, µ, ½, æ□A
□i, Ü, Å, ð ComWin —p, ĺŽÀ□sftf@fCf<, í, » , ð, Ü, ÜŽg, ð, Ü, ·□B

•ĩX“ _

ver 1.70

int FAR PASCAL Puts(LPSTR);

int FAR PASCAL Fputs(LPSTR, LPSTR);

BOOL FAR PASCAL CallCommand(FARPROC FAR *, LPSTR,
LPWORD);

ver 1.80J

LONG FAR PASCAL Puts(LPSTR);

LONG FAR PASCAL Fputs(LPSTR, LPSTR);

BOOL FAR PASCAL CallCommand(FARPROC FAR *, LPSTR,
LPLONG);

^ø□”“™ , ð, È, é, x, 32fĲfĲfĲfĲ‘l, Å“□^ê, ·, é•ûœü, Å•ĩX, µ, Ü, µ, ½□B

ComWin ver 1.70 , æ, è

DOSfRf}f“fh, ð□l—¹•û-@, æ•ĩ, í, è, Ü, ·□B

^È‘O, í "Press any key" , Æ, ç, æf□fbfZ□[fW, ð□o—í, µ, Ä

^êŽž‘âŽž~ , µ, Ä, ç, Ü, µ, ½, æ□A

ver 1.70 , ©, ç, ĺfLfffvĲfĲfĲ“ , É<xŽž~‘t, Æ, ç, æf□fbfZ□[fW, ð

□o—í, µ, Ä<xŽž~□ó‘Ô, É, È, è, Ü, ·□B

fz□[f€fĲfWfVfĲfĲ“ , ð, Ü, Ü, Å, ±, ð□ó‘Ô, ©, çDOS‘<, ð•Å, ŕ, é, É, í□A

Alt(or GRPH)+Space ---> 'C' , ĺfL□[‘€□], ð□s, Å, Ä, , ¾, ¾, ç□B

,Ü,½ comwinx.pif ,Í comwinx.exe ,Æ“˘,¶ffffBfŒfNfgfŠ,É’u,ç,Ä,,¾,¾,ç□B
ver 1.60 ^È’O,ì’€□ì□«,ª□D,Ý,ì,©,½,Í“˘••,ì comwxold.pif ,đ
comwinx.pif ,ÉfŠf□[f€„µ,Ä,“Žg,ç,,¾,¾,ç□B
PIFfGfffBf^,Å’t□g,đ,Ý,Ä•Ò□W,µ,Ä,à%oÅ“\,Å,·□B
DOS/V ft□[fU□[,ì•û,É,Í□\,µ-ó,²,´,ç,Ü,¹,ñ,ª□AffftfHf<fg,Å,Í
%opŒêf,□[fh,ÅDOSf{fbfNfX,ª<N“®„µ,Ü,·□B
,±,ê,Í□ìŽÒ,ìf□fCf“ŠJ”ŠÂ<«,ª98Œn,È,ì,Å,²—¹□³,,¾,¾,ç□B

9.'~[]CE []A'—<à•û-@

'[]^Ó

ComWin ,Æ ComWin32 ,Í•Ê\ftfg,È,ì,Å[]A
ComWin ,Æ ComWin32 ,ì—¿<à,Í•Ê•¥,ç,Å,·[]B
, "ŠÔ^á,ì,È,ç,æ,π,É, "Šè,ç,ç,½,μ,Û,·[]B

ComWin32 ,ì~[]CE ,Í'OŽ>[]³•F,ª•Û—L,μ,Û,·[]B

ComWin32 ,ìfvfFfAfeFfA,Å,·[]B

ComWin32 -{ 'ì,đŽg,Á,Ä,ì—~%ov[]s^ x,đ~[]ŽÒ,É—¹%ođ,È,μ,É
[]s,π,±,Æ,đ^ê[]Ø<Ö,[]Ü,·[]B

(ComWin32 'í%ž,ì\ftfg,É,Ä,ç,Ä,ÍŠÖ—^,μ,Û,¹,ñ[]B)

ComWin32 "à,ìftf@fCf<,É%ü•İ,đ%Á,ì,½,à,ì[]A

,Û,½,ìftf@fCf<,ì^ê•",đ"z•z,·,é,±,Æ,đ<Ö,[]Ü,·[]B

(C,ì\[]fXfR[]fh,đ%ü—Ç,μ,½[]¬%oÊ•""P'ì,ì"z•z,Í—áŠO,Å,·[]B)

ComWin32 ,đŽg—p,·,é,±,Æ,É,æ,Á,Ä"[][]μ,½,ç,©,È,é'¹ŠQ"™,É,à[]A

'~[]ŽÒ,ì^ê[]Ø[]Ó"C,đ•%o,ç,Û,¹,ñ[]B

ComWin32 ,ì<@"\fAfbfv,đ[]s,π<`-±[]AfofO'í%ž,đ-³—¿,Å[]s,π<`-±,đ

'~[]ŽÒ,ì•%o,í,È,ç,à,ì,Æ,μ,Û,·[]B

ComWin32 ,ì'¼,ìfìfbfjg[][]fN,Ö,ì"[]Ú[]AŽGŽ[],Ö,ìfofCfjŠ"Y•t,ì

'~[]ŽÒ,ì—¹[]³,ª•K—v,Å,·[]B

ComWin32 ,ìŽGŽ<LŽ-[]Đ%oî,ì<qŠİ"l,ÈŠî[]€,Å[]',©,ê,½,à,ì,Å, ,é,ì[]A

Ž©—R,É[]s,Á,Ä,©,Û,ç,Û,¹,ñ[]B

+-----

| fvfFfAfeFfA,Æ,μ,Ä,ìŽg—p[]đCE[]

| "o~^—¿ 2000%o~

| ŽŽ—pŠúŠÔ 2[]TŠÔ

| ŽŽ—pŠúŠÔ't,ì<@"\[]\$CEÀ ,È,μ

| '—<à•û-@

| %oÄ"\,ÈCEÀ,è[]ANIFTY-Serve ,ì'—<à'ã[]sfVfXfef€,đ,²—~—p,,¾,¾,ç[]B

| GO SWSOKIN ,Å'—<à'ã[]sfT[]fX,É"ü,è[]Af[]jf...[][,É[]],Á,Ä

| '—<à,đ[]s,Á,Ä,,¾,¾,ç[]BSW"Ô[]t,ì 1323 "Ô,Å,·[]B

| '—<à,ªŠm"F,¾,êŽÿ'æ[]A"o~^fL[]f[]fh,đ"dŽqf[]f<,É,Ä

, 'm, ç, 1, μ, Ü, · □ B

, Ü, 1/2 ' — < à ' ä □ s f T □ [f r f X, ð, 2 — ~ — p, Å, «, È, ç □ ê □ †, í □ A
^ È % ° °, ì < â □ s Ç È ú □ À, É □ U □ ž (Ž è □ " — ¿ • Ê • ¥), ð □ s, Á, Ä, , 3/4, 3, ç □ B

< â □ s ' æ ^ ê Š © < Æ < â □ s " ¿ " † Ž x " X
" X " Ô □ † 645
Ç È ú □ À " Ô □ † 1470432 (• □ ' Ê)
Ž □ - 1/4 ' O Ž > □ 3 • F (Ĩ ' Ā p × Ĩ » È °)

, " Ž è □ ", Å, ·, ° □ A " ü < à Ç È ä, É ^ È % ° °, ì Ž - □ € , ð - 3/4 < L, ì, x, |
" d Ž q f □ □ [f < (□ , □ \$) □ A, à, μ, , í — t □ ' , É, Ä, ' ' m, ç, 1, , 3/4, 3, ç □ B
(, ' ' m, ç, 1, ì, È, ç □ ê □ † □ A ' í % ° ž, °, Å, «, Ü, 1, ñ □ B)

(1) □ Z □ Š □ E — X • Ö " Ô □ † □ A (2) Ž □ - 1/4 □ A (3) □ U □ ž " ú Ž ž □ A (4) f \ f t f g f E f f f A -
1/4 □ A (5) Š ' ' z

' — • t □ æ
" d Ž q f □ □ [f < S G Q 0 0 3 1 0 @ n i f t y s e r v e . o r . j p
— X ' — 7 7 0 " ¿ " † Ž s % ° ° « • ' — □ 1/4 " " 4 3 6 Ç È K ' ° □ Z ' î 2 □ † ' O Ž > □ 3 • F

' — < à, ° Š m " F, Å, « Ž Ÿ ' æ □ A " o ~ ^ f L □ [f □ □ [f h, ð □ u • • □ ' □ v, É, Ä, ' ' m, ç, 1, μ, Ü, · □ B
(□ Z □ Š, í • ĩ □ X, É, È, é % ° ° Å " \ □ «, à, , è, Ü, ·, ì, Å □ A ' m □ |, ì D, ð, 2 — ~ — p, Å, «, é □ ê □ †, í
, È, , x, □ A ' m □ |, ì " d Ž q f □ □ [f < , ð, 2 — ~ — p, , 3/4, 3, ç □ B
, È, " □ A " d Ž q f □ □ [f < , ° - { □ |, ì ID , 3/4, Æ Š m " F, Å, «, é □ ê □ †, í
" d Ž q f □ □ [f < , Å, ' ' m, ç, 1, ·, é □ ê □ †, à, , è, Ü, · □ B)
, Ü, 1/2 □ A f l f " f % ° ° f C f " , Å, ì ' — < à, Æ ^ á, ç □ A < â □ s □ U □ ž, Å, í
□ v ' — , È ' í % ° ° ž, °, Å, «, Ü, 1, ñ, ì, Å □ A, , ç, © , ¶, ß, 2 — 1 □ 3 , , 3/4, 3, ç □ B

• i □ » □ ð Ç È □

1, Å, ì f % ° ° f C f Z f " f X, É, Å, « f C f " f X f g □ [f < f } f V f " , í 1 ' ä, É Ç È À, è, Ü, · □ B
, 1/2, 3/4, μ □ A □ 3 < K f t □ [f U □ [, í, ·, x, Ä, ì f } f V f " , Å ' 1/4 Ž Ò, É Ž g — p, 3, 1, È, ç, ±, Æ, ð
□ ð Ç È □, É • i □ " , ì f } f V f " , É f C f " f X f g □ [f < % ° ° Å " \, Å, · □ B

— á, ì, î □ A f t f C f g — ~ — p, ì □ ê □ † f % ° ° f C f Z f " f X □ " , ì Ž Ÿ, ì, æ, x, É, È, è, Ü, · □ B
(f % ° ° f C f Z f " f X □ ") = min ((f t f C f g " à f } f V f " □ ") , (f t f C f g " à □ | □ "))

ftfŠ[]\$“x

ComWin32 ‘î%ož,lf\ftfg,đflfbfgf[]fN[]ă,ÉŒöŠj,³,ê,½[]žÒ,í

Ž,,^¶,Éf[]f<,đ,,¾,³,ê,îA-³—¿,Å[]³<Kft[]fU[][“o~^,ìžè’±,«,đ[]s,ç,Ü,·[]B

fTf|[]fg

“Á,Éžw’è,ì,È,ç[]ê[]#fo[]fWf#f“fAfbfv—¿,í-³—¿,Å,·[]B

“o~^fL[]f[]f[]fh,í^È‘O,ì,à,ì,žg,ì,Ü,·,ª[]A

fZfLf...fŠfefB,ìšÖŒW,Å•ï[]X,·,é[]ê[]#[],à, ,è,Ü,·[]B

,±,ì[]ê[]#[]A[]³<Kft[]fU[][,ì•ù,É,íž-‘O,É,“’m,ç,¹,μ,Ü,·[]B

[]³ž® ,ÈfŠfŠ[]fX[]ê[]Š,í NIFTY FWINAL LIB 5 ,ì,Ý,Æ,μ,Ü,·[]B

ComWin32 ,É’í,μ,Ä,ìš‘z[]A—v-],í[]AŒÂ[]|“l,È,à,ì,Å,È,çŒÀ,è[]A

NIFTY FWINAL MES 5 ,Å,“Šè,ç’v,μ,Ü,·[]B

(ŒÂ[]l,ìf[]f[]f<f{fbfNfX—e—Ê,É,íŒÀ,è,ª, ,è,Ü,·,ì,Å[]B)

+-----

[];Œă,Æ,à<@“\fAfbfv,μ,Ä,ç,—\’è,È,ì,Å

,È,É,Æ,¼[]A,æ,ë,μ,,“Šè,ç,ç,½,μ,Ü,·[]B

‘Ož>[]³•F <SGQ00310@niftyserve.or.jp>

<http://www.justnet.or.jp/ebf/uhdspag/mnishijima/MNISHI.HTM>

10. "••ftf@fCf<,i□Ú□x

- (1) comwinx.exe, comwinx.pif
- (2) comwld.exe, comwld.pif, vcomwd.386
- (3) comwin.dll, comwin.lib ("ñ"••), comwin.h
- (4) comwins.dll
- (5) comwint.dll
- (6) comwin.hlp, readme.txt
- (7) comwreg.exe
- (8) comwin32.dll, comwin32.lib
- (9) bhole.exe
- (10) comwin.ini
- (11) install.bat
- (12) hello.c, hello.def, hello.exe, hellocpp.cpp
- (13) sample1.c, sample1.def, sample1.exe
- (14) sample2.c, sample2.def, sample2.exe
- (15) sample3.c, sample3.def, sample3.dll
- (16) sample4a.bat, sample4b.cws
- (17) sample5.c, sample5.def, sample5.exe

(1) comwinx.exe, comwinx.pif

* comwinx.exe

ComWin ,ì'[--f,fWf...□[f<,Å,·□B
ft□[fU□[,©,ç,ìfRf}f"fh,ðŽó,~•t,~fvf□fOf%of€ ,ð<N"® ,μ,Û,·□B
ComWin,É'í%ož,μ,½fvf□fOf%of€ ,ì□o—Í,ð•\Ž!,μ,Û,·□B
,Û,½□A•\Ž!€<%oÊ,ð•Û'¶,·,é<@"\,ðŽ□,Á,Ä,ç,Û,·□B
ftfHf"fg□A□F"™ ,ì%œ-Ê%ň,è,ðŠÇ—□,μ,Û,·□B

* comwinx.pif

'<□ó'Ô,Å<N"® ,μ□I—¹Žž,É<xŽ~□ó'Ô,É,È,é□Y'è,ìPIFftf@fCf<,Å,·□B
fvf□fOf%of€ ,Í command.com ,ðŽg—p,μ,Ä,ç,Û,·□B
(fz□[f€f]fWfVf†f" ,©,çŽè,ð—£,³,„,ÉfEfBf"fhfE,ð•Â,¶,é,É,Í□A

Alt(Grph)+Space --> C ,Æ□^—□,μ,Ä,,¾,³,¢□B)

comwinx.pif ,ì“à—e,í PIFfGffBf^ ,É,æ,Á,Ä•Ò□W,Å,«,Ü,·□B
ŠeŽ©,ìŠÂ«« ,Å□Å“K%» ,μ,Ä%» ,¾,³,¢□B

ŽQ□Æ Windows fvf□fOf%of€ ,ìf□□[f_□[,Æ,μ,ÄŽg—p

(2) comwld.exe, comwld.pif, vcomwd.386

* comwld.exe

DOS fRf}f“fh,ì“ü□o—í,đftfbfN,μ□Avcomwd.386 ,É“n,·f□□[f_□[,Å,·□B
,Ü,½□A“ ®□if,□[fh,É,æ,Á,Ä,í□ADOSfRf}f“fh,đ□l—
¹Žž,É^êŽž’âŽ~ ,¾,³,¹,Ü,·□B

* comwld.pif

comwld.exe —p,É□Å“K%» ,¾,ê,½PIFftf@fCf<,Å,·□B
ŠeŽ©,ìŠÂ«« ,É, ,í,¹,Ä□Å“K%» ,μ,Ä,,¾,³,¢□B

* vcomwd.386

DOS ,ìfRf“f□[f<□o—í,đ Windows ,É“n,·%»¼’zfffofCfXfhf%ofCfo,Å,·□B
—~—
p,·,é,½,ß,É,í□AWindowsfffBf¢fNfgfŠ□AWindowsfVfXfef€fffBf¢fNfgfŠ□A
fpfX,ì’É,Á,½fffBf¢fNfgfŠ,ì,¢, ,ê,©,É’u,«
system.ini ,ì [386Enh] fZfNfvf†f“ ,É device=vcomwd.386 ,ì
<L□q,đ%»Á,!,Ä,,¾,³,¢□B

(3) comwin.dll, comwin.lib (“ñ“~••), comwin.h

* comwin.dll

•i□” ,ìComWinfNf%ofCfAf“fg(‘[—□j,ÆŠefRf}f“fhDLL□AŠO•”fRf}f“fh,ì
“ü□o—í,đfXfPfWf...□[fŠf“fO,·,é ComWin fVfXfef€,ìŠj,Æ,È,éDLL,Å,·□B
’¼,ìfvf□fZfX,©,çComWin,É•¶Žš—ñ,đ“ü□o—í,·,é,½,ß,É□A
ExportŠÖ□” Puts, Gets “™ ,đ’ñ<ÿ,μ,Ä,¢,Ü,·□B
,Ü,½□AfRf}f“fhf%ofCf“ ,ì•¶Žš—ñ,đ%»đŽß,·,é,½,ß,ìfT□[fRfX,Æ,μ,Ä□A

ExportŠÖ" MakeArgument ,đ'ň<ÿ,μ,Ä,ç,Ü,·□B

* comwin.lib ("ň"••)

```
comwin.dll,đ—~—p,·,é,½,β,lfCf"f|□[fgf%ofCfuf%ofŠ,Å,·□B
ŠJ"ŽÒ^ÈŠO,Í•K—v, ,è,Ü,¹,ň□B
fCf"f|□[fgf%ofCfuf%ofŠ,đŽg—p,·,é,æ,è,à□A
f,fWf...□[f<'è<`ftf@fCf<,Å IMPORTS •¶,đŽg—p,μ,½,Ù,α,ª□A
•ÛŽç□ã□D,Ü,μ,ç,Æ"»'f,μ□A"••,μ,È,ç,±,Æ,É,μ,Ü,μ,½□B
comwin.dll ,đ—~—p,·,é,½,β,É,Í□A
f,fWf...□[f<'è<`ftf@fCf<,É
imports comwin.Puts
,Æ<L□q,μ,Ä—~—p,μ,Ä,,¾,¾,ç□B
```

* comwin.h

```
ComWin —pf\ftfg,đŠJ",·,é,½,β,lfwfbf_□[,Å,·□B
ŽQ□l,É,μ,Ä,,¾,¾,ç□B
```

(4) comwins.dll

```
•W□€fRf}f"fhdLL,Å,·□B
ŠeŽí,ì"à•"fRf}f"fhd,đ'ň<ÿ,·,é,½,β,ìDLL,Å□A
ComWin ,É"à•"fRf}f"fhd,đ'ň<ÿ,·,é,½,β,lfCf"f^□[ftfF□[fX,É
□€,¶,Ä□ì□¬,¾,è,ç,Ü,·□B
Æê<â%ođŽß□AfXfNfŠfvg%ođŽß,à□s,Á,Ä,ç,Ü,·□B
```

ExportŠÖ" CallCommand(%o¼□ì)□A

CallInterpreter(%o¼□ì)□A

CallScript(%o¼□ì)□A

,Å comwin.dll ,Æff□[f^,ìŽó,"n,μ,đ,"±,È,Á,Ä,ç,Ü,·□B

```
'Ê□í,ìftf@fCf<□AfffBfÆfNfgfŠ'€□ìEnfRf}f"fhd,í
,·,×,Ä comwins.dll ,ª'S"—,μ,Ä,ç,Ü,·□B
(break, cls, exit "™,ì[--^È'¶fRf}f"fhd,í
comwinx.exe,ì-,,β,±,ÝfRf}f"fhd,Å,·□B)
```

(5) comwint.dll

'Ê□M—p,lfRf}f“fhDLL,Å,·□B
term fRf}f“fh,đ'ñ<ÿ,μ□AŠÈ^Õ'[-<@”\,đ'ñ<ÿ,μ,Ü,·□B

ŽQ□Æ term

(6) comwin.hlp, readme.txt

comwin.hlp ,Í flf“f%ofCf“fwf<fvftf@fCf<,Å,·□B
readme.txt ,Í ŠÈ'P,È□Đ%oî•¶,Å,·□B

(7) comwreg.exe

ŽŽ—pŠúŠÔ,ì•\Ž!,đ,μ□A□³<Kft□[fU□[,ì“o~^,đ,·,éfRf}f“fh,Å,·□B
'P'ì,Å,í<N“® ,Å,« ,Ü,¹,ñ□B
□³<Kft□[fU□[,ì“o~^ ,³í,Ý,μ,³/₄,ç□í□œ,μ,Ä,,³/₄,³,ç□B
(ŽQ□Æ□A“®□ìŠÅ<<<)

(8) comwin32.dll comwin32.lib

ComWin32—p,lfjftfg,©,ç ComWin ,đĀÄ,Ñ□o,¹,é,æ,æ,É,·,éfAf_fvf^ ,Å,·□B
ftfjfo□[fTf<fTf“fN,ÆĀÄ,î,ê,Ü,·□B
,±,lf,fWf...□[f<,đ—~—p,·,é,¹/₂,β,É,Í Win32s ,³fvfXfef€,ÉfCf“fXfg□[f<
,³,ê□AWindows ,³fGf“fnf“fXfgf,□[fh,Å“®□ì,μ,Ä,ç,é•K—v,³, ,è,Ü,·□B
,Ü,¹/₂ftf@fCf<-¹/₄,Í Windows 3.1 ,Æ Windows 95, NT ,Å“~^êfjftfg,đ

“® , © , “ s □ ð ã ComWin32 , ì ‘ t □ • DLL comwin32.dll , Æ “ ~ - ¼ , É , È , Á , Ä , ç , Ü , • □ B
□ ã □ ‘ , « , μ , È , ç , æ , x , É , ² ‘ □ Ó , , ¾ , ³ , ç □ B

“ ® □ ð Š T — v

ComWin16AP --> comwin.dll --> comwinx.exe (Win3.1)

ComWin32AP --> comwin32.dll --> comwin.dll --> comwinx.exe

(Win32s)

ComWin32AP --> comwin32.dll --> comwpad.exe (Win95,NT)

ComWin16AP --> comwin.dll --> comwin32.dll --> comwpad.exe

(Win95,NT)

• i □ “ , ì f v f % o f b f g f t f H □ [f € , Å “ ~ ^ ê f o f C f i f Š , ð “ ® , © , • , ± , Æ , æ % o Å “ \ , É , È , è , Ü , • □ B

comwin32.lib , í ComWin32 — p , ì f ð f t f g , ð Š J “ , • , é , Æ , « , É • K — v , É , È , è , Ü , • □ B
(MS-VC++2.0 , Å , ì f , f W f ... □ [f < ‘ è < ` f t f @ f C f < , ì IMPORTS • ¶ , æ Ž g , ì , È , ç , ì , Å , • , æ □ A
f C f “ f □ [f g f % o f C f u f % o f Š , É — Š , ç , È , , Å □ ð , p • û — @ , ð , ² ‘ ¶ , ¶ , ì • û , æ , ç , ç , Á , μ , á , ê , Ì □ A
, ² ^ ê • ñ , , ¾ , ³ , ç □ B • s • K — v , É f o f C f i f Š f t f @ f C f < , É — Š , é , ì , í □ A
• Û Ž ç □ ã □ A □ D , Ü , μ , , , è , Ü , ¹ , ñ , © , ç □ B)

(9) bhole.exe

ComWin , Æ , í , Ü , Á , ½ , - ³ Š Ö Ç E W , ì 32 bit f S f ~ “ □ u f u f % o f b f N f z □ [f < □ v , Å , • □ B
Windows 3.1 + Win32s , Windows 95 , NT , Å “ ® □ ð , μ , Ü , • □ B

f t f @ f C f < f } f □ [f W f f , â ComWin , ì ‘ ð • ¶ Ž š — ñ , ð f h f % o f b f O , μ □ A
□ u f u f % o f b f N f z □ [f < □ v , ì f A f C f R f “ , É f h f □ f b f v , • , é , ± , Æ , Å
Š Y “ - f t f @ f C f < , ð □ í □ æ , μ , Ü , • □ B

ComWin32 — p , ì f ð f t f g , ð % o ð “ K , É % o ^ — p , • , é , ½ , ß , É , í □ A
f □ f , f Š □ ã (f f f B f X f N □ ã , Å , í , È , ç) , É Win32s , æ ‘ ¶ □ Y , μ , Ä , ç , é • K — v , æ , , è , Ü , • □ B
, μ , © , μ □ A Win32s , í □ í , É f □ f , f Š □ ã , É , , é , í , - , Å , í , È , □ A Win32 — p , ì f ð f t f g , æ
Š J Ž n , • , é , Æ “ ~ Ž ž , É f □ f , f Š , É “ Ç , Y □ ž , Ü , ê □ A □ I — ¹ , • , é , Æ “ ~ Ž ž , É f □ f , f Š , © , ç
“ j Š ů , ³ , ê , Ü , • □ B Win32s Š Ö ~ A f t f @ f C f < , í □ ð Ç E v , Å 1 M byte , ð ‘ , ì , é f t f C f Y , ð
, à , Á , Ä , ç , Ü , • , © , ç □ A , ± , ì f □ [f o □ [f w f b f h , í , © , È , è , ì , à , ì , Å , • □ B

%ođŒ^□ô,ÍŠÈ'P,Å Win32—p,lfvf□fOf%of€,đŽÀ□s,μ,½,Ü,Ü,É,·,ê,î□A
Win32s ,Íf□f,š,É□í“ ,μ,Ü,·□B,μ,©,μ□A,à,Á,Æ,àf|fsf...f%□□,È
Win32—p,lfvftg□uftfš□lfzf<□v,ÍfQ□lf€fvtfg,Å, ,è□A□E□ê“™ ,Å,ì
Žg—p,ª□ç“ì,Èft□lfU□□,à'½,ç,ÆŽv,í,ê,Ü,·□B,» ,±,ÅŽèŒy,Èfvftg,Æ,μ,Ä
32bitfSf~” ,đ“~□« ,μ,Ü,μ,½□B

□ufuf%ofbfNfz□lf<□v,Í ftfš□lfvtfg,Å, ,è□A
ComWin ,Æ,í,Ü,Á,½,-³ŠÖŒW,lfvtfg,È,ì,Å□A
,²Ž©—R,É,“Žg,ç,,¾,³,ç□B

(10) comwin.ini

ComWin ,ìŠÀ<<fvf□ftf@fCf<,Å,·□B•K, ,WindowsfffBfŒfNfgfš,É□ì,ç,ê,Ü,·□B
□%oŠú□ó'Ô,Å,±,lfvf@fCf<,ª,È,,Ä,à□AŽ©“®“l,É□ì,ç,ê,Ü,·□B

ŽŸ,lfzfNfvf†f“ ,ª'è<` ,³,ê,Ü,·□B

* [CommandDll]

ft□lfU□□,ª“ÆŽ©,É□ì□¬,μ,½“à•“fRf}f“fh,đ'ñ<Ÿ,·,éDLL,đ
,±,lfzfNfvf†f“ ,É“o~^ ,·,é,±,Æ,É,æ,è“à•“fRf}f“fh,đŠg'£,Å,« ,Ü,·□B
fGfffBf^“™ ,Å□',«Š·,ì,Ü,·□B

* [InterpreterDll]

ft□lfU□□,ª“ÆŽ©,É□ì□¬,μ,½Œè<ã%ođŽß—p,đ'ñ<Ÿ,·,éDLL,đ
,±,lfzfNfvf†f“ ,É“o~^ ,·,é,±,Æ,É,æ,èfRf}f“fhf%ofCf“ ,É
□D,Ý,ì□•¶,đ'è<` ,·,é,±,Æ,ª,Å,« ,Ü,·□B
fGfffBf^“™ ,Å□',«Š·,ì,Ü,·□B

* [ScriptDll]

ft□lfU□□,ª“ÆŽ©,É□ì□¬,μ,½fXfNfšfvfg%ođŽß—p,ìDLL,đ
,±,lfzfNfvf†f“ ,É“o~^ ,·,é,±,Æ,É,æ,èfofbf` □^—□,đ
<—í,É,·,é,±,Æ,ª,Å,« ,Ü,·□B
fGfffBf^“™ ,Å□',«Š·,ì,Ü,·□B

* [Color]

ffffHf<fg,lfvfHf“fg□F,đ•Ù'¶,μ,Ü,·□B
□Ý'è,ì•Ù'¶f_cfAf□fO,ÅŽ©“®□¶□¬,³,ê,Ü,·□B

* [Font]

ffftfHf<fg,lftfHf“fg’ ® «,đ•Ú‘¶,μ,Ü,·□B
□Ý’è,ì•Ú‘¶f_fCfAf□fO,ÅŽ©“ ® □¶□¬,³,ê,Ü,·□B

* [Window]

<N“ ® Žž,lfEfBf“fhfEftfCfY,đ‘¶,μ,Ü,·□B
□Ý’è,ì•Ú‘¶f_fCfAf□fO,ÅŽ©“ ® □¶□¬,³,ê,Ü,·□B

* [StartUp]

<N“ ® Žž,ÉŽ©“ ® “l,Éf□□[fh,·,éfvf□fOf%of€,đ“o~^,μ,Ü,·□B
fGfffBf^,Å•Ò□W,μ,Ü,·□B
<N“ ® Žž^ø□“ü—lf_fCfAf□fO,Å□X□V,³,ê,Ü,·□B

* [Alias]

fGfCfŠfAfX,đ“o~^,μ,Ü,·□B
alias, unalias fRf}f“fh,ÅComWin“à,©,ç□X□V,μ,Ü,·□B

* [Console]

fNf%ofCfAf“fg—l^æ,ì“ü□o—l,ÉŠÖ,·,é□“□Ý’è,đ“o~^,μ,Ü,·□B

* [Auxiliary]

’É□Mf|□[fg,Æ,ì“ü□o—l,ÉŠÖ,·,é□“□Ý’è,đ“o~^,μ,Ü,·□B

* [Accessory]

fEfBf“fhfE□Af_fCfAf□fO,ÉŠÖ,·,é□“□Ý’è,đ“o~^,μ,Ü,·□B

* [Keyboard]

fL□[Š,,è“-,Ä,đ“o~^,μ,Ü,·□B

* [History]

%oβ<Ž,lfRf}f“fh,ì—š—đ,đ•Ú‘¶,μ,Ü,·□B
ComWin “à,Å’€□ì,·,é,±,Æ,Í, ,è,Ü,ñ,¹,ñ□B
comwinx.exe ,ì<N“ ® Žž,ÉŽ©“ ® “l,É“Ç,Ý□ž,Ü,ê□A
□l—¹Žž,ÉŽ©“ ® “l,É□’,«□ž,Ü,ê,Ü,·□B

* [ExecEx]

Šg’£<N“ ® ,ì□Ý’è,đ•Ú‘¶,μ,Ü,·□B

* [ExecDOS]

DOSfRf}f“fh,ì<N“ ® f,□[fh,đŽw’è,μ,Ü,·□B

* [etc]

ŠÇ—□—p□AfffofbfO—p,lfZfNfVf#f“ ,Å,·□B
“Á,ÉŽw’è,ì,È,ç□ê□#□’,«Š,·,l,È,ç,Å,,³/₄,³,ç□B



(11) install.bat

```
'P,È,é DOS ,\fofbf`ftf@fCf<,Å,·,ª□A
,È,ç,æ,è,í, ,Á,½,Û,æ,ª•Ö—~,È,ì,Å“~••,µ,Û,·□B
```

```
Uninstall ,ì,µ,©,½,à□à-¾,µ,Ä,ç,Û,·□B
(ComWin fvfxfef€,ìê□‡ del comw*.* ,Å□\•ª,Å,·□B)
```

(12) hello.c, hello.def, hello.exe hello.cpp

```
Exports ŠÖ□” Puts ,ìŠÈ'P,ÈŽg—p—á,Å,·□B
ComWinfNf%ofCfAf“fg,É "hello world" ,ð□o—í,µ,Û,·□B
hello.c ,í CÆ¾Æê□Ahello.cpp ,í C++Æ¾Æê,Å□',©,ê,Ä,ç,Û,·□B
```

```
□Å<ß,íŠe□^—□CEn,àDOS,©,çŠÈ'P,É^Ú□s,Å,«,éfCf“f^ftfF□[fX,ð
—p^Ó,µ,Ä,ç,Û,·,ª□A^È'O,í, ,è,Û,¹,ñ,Å,µ,½□B
,Æ,É,©,Windowsfvf□fOf%of€,ª'N,Å,àŽèCey,É□ì,è,é,æ,æ,É,È,è,î,ç,ç,Å,·,Ë□B
```

(13) sample1.c, sample1.def, sample1.exe

```
Exports ŠÖ□” MakeArgument ,ìŽg—p—á,Å,·□B
WinMain ,ìRf}f“fhf%ofCf“^ø,«□”,ð main ,ì
argc, argv C`Ž®,É•İŠ,µ,Ä□AComWinfNf%ofCfAf“fg,É
2'È,è,ì•û-@,ðŽg,Á,Ä□o—í,µ,Û,·□B
nearf|fCf“f^, farf|fCf“f^,ì“ü,èCèð,¶,Á,½fAfhfCfX,ì
Žó,~“n,µ,í'â•ï,È<ê~J,ð”º,æ,à,ì,Å,·,Ë□B
```

```
Fputs, Fgets ,ðŽg—p,µ,½“ü□o—í—á□A
System fRf}f“fh,ìŽg—p—á□A
fRf“f□[f<,ì□”□î•ñ,ìŽæ“¾—á□A
ŠÂ<<•ï□”,ì'€□ì—á□A
fGfXfP□[fvfV□[fPf“fX,ìŽg—p—á□A
```

ŠÈ'P,È,"ŠG,©,«•û-@,ì-á,à, ,è,Ü,·□B

(14) sample2.c, sample2.def, sample2.exe

fffofbfOf□fbfZ□[fW,ì□o—í—á,Å,·□B
Windowsfvf□fOf%of€ , © , ç ComWin fNf%ofCfAf“fg,É
f□fbfZ□[fW,ìŽí—p□Af□□[fhfpf%of□□[f^□Af□f“fOfpf%of□□[f^ ,ð□o—í,μ,Ü,·□B

Ž—,½,æ,κ,È<@“\,ðŽ□,Â,à,ì,Æ,μ,Ä DBWIN ,Æ,ç,κfc□[f<,ª
SDK (Šj“fLfbfh) ,É, ,è,Ü,·,ª□A, ,,Ü,Å,àfffofbfOfc□[f<,É,·,¬,Ü,¹,ñ□B
“Á,ÉfnfCfEf]ŠÂ«« ,Á,Í•¶Žš,ª□¬,³,·,¬,Ä-Ú,É,æ,, ,è,Ü,¹,ñ□B
fffofbfO•¶,ð TRUETYPEftfHf“fg ,ÅŠi□D—Ç,□o—í,·,é,ì,à□A
,½,Ü,É,í<C•ª“]Š·,É,È,è,Ü,¹,ñ,©□B

(15) sample3.c, sample3.def, sample3.dll

Šg'£fRf}f“fhDLL,ì□ì□¬—á,Å,·□B
[CommandDII]
,É“o~^ ,·,é,±,Æ,Å□AfRf}f“fh,ª—~—p,Å,« ,Ü,·□B

UNIX f%ofCfN,ÈfRf}f“fh,ð Windows □ã,ÅŠi□D—Ç,
fofŠfofŠŽg,ç,½,ç,ÆŽv,ç,Ü,¹,ñ,©□B
(Windows ,É,à-{Ši“l,ÈfLfff%ofNf^fEfBf“fhfE,ª—~ ,μ,ç,Å,·,È□B)
(DOS BOX ,í, ,,Ü,Å,à%¼'zDOSf}fVf“ ,É,·,¬,Ü,¹,ñ□B)

[InterpreterDII] ŠÖEW
InterpreterDII ,Å,Í□A
UNIX ,ì,æ,κ,ÉftfHfAfOf%ofEf“fh,ðffftfHf<fg,Æ,μ□A
& ,ÅfofbfNfOf%ofEf“fh<N“ ® ,³,¹,éfRf}f“fh%ðŽš,ì—á,ðŽì,μ,Ü,·□B

[ScriptDLL] ŠÖEW
ScriptDII ,Å,Í□ADOC ,Æ,ç,κŠg'£Žq,ðŽ□,Á,½ftf@fCf<,ð

Žw'è,·,é,Æ notepad ,æ<N" ®,·,é,Æ,ç,æ'è<` ,ðŽ!,μ,Ä,ç,Ü,·□B

ftf@fCf<,İŞÇ—□□ã□AInterpreterDll, CommandDll, ScriptDll ,ð"~,¶
DLL ,É,Ü,Æ,ß,Ü,μ,½,²□ACE³—^,Í•ÊCEÂ,É□ì□¬,Å,«,,é,à,ì,Å,·□B

(16) sample4a.bat, sample4b.cws

ComWin—pfofbf`ftf@fCf<,İfTf"fvf<,Å,·□B

ComWin—pfofbf`ftf@fCf<,ì□ì,è•û,ÍŠÈ'P,Å
'Ê□í,İDOS,İfofbf`ftf@fCf<,ì^ê□s-Ú,É "REM BAT FOR COMWIN" ,Æ
"ü—Í,·,é,¾,¬,Å□\•²,Å,·□B, ,Æ,İftfH□[f}fbfg,Í
DOS ,İfofbf`ftf@fCf<,É□€,¶,Ü,·□B

,Ü,½ ComWin —p,İfofbf`ftf@fCf<,ð•ÊCEÂ,ÉŞÇ—□,·,é□I,ì,½,ß,É□A
samel4.cws ,ÆfŞfI□[f€,μ,ÄŽg—p,·,é,±,Æ,à%oÂ"\,Å,·□B
CWS ,Æ,ç,æŞg'£Žq,Í ComWin —p,İfofbf`ftf@fCf<,Æ,μ,Ä
"FŽ¬,³,ê,Ü,·□B•¶-@,Í bat Šg'£Žq,Æ"¬,¶,Å,·□B
(CWS ,ì□ê□‡ "REM BAT FOR COMWIN" ,Í•s—v,Å,·□B)

ŽQ□Æ fXfNfŠfvfgfŠftf@fCEf"fx
ftfHfAfOf%ofEf"fh<N" ®,ÆfofbfNfOf%of"fh<N" ®

(17) sample5.c, sample5.def, sample5.exe

ComWin —p,ì'[-,ì□ì□¬—á,Å,·□B
,¬'e—,Å,·,²ŠÈ^Öf%of"f`ff□[,É,È,Á,Ä,ç,Ü,·□B
comwin.dll ,ð—~—p,μ,Ä,ç,Ü,·,ì,Å□A
fGfCfŠfAfX□AfAvfŠfP□[fvf‡f",İŠÖ~A•t,¬<N" ® "™,ì
fT□[frfX,Í—~—p%oÂ"\,Å,·□B

11. fRf}f“fhfŠftf@fĀf“fX

- (1) alias (•Ē-¼'è<`Ų'è)
- (2) cd, chdir (fffBfĀfNfgfŠ•ïX)
- (3) clip (fNfŠfbvf{[fh'—M)
- (4) cls (%æ-ĒÁŽ)
- (5) comwin (fVfXfef€î•ňfRf}f“fh)
- (6) comwins (fT[fRfXfRf}f“fh)
- (7) copy (ftf@fCf<•;ŽĒ)
- (8) ctty (“üo—íffofCfX,ì•ïX)
- (9) date (“ú•tŽQĀ•ïX)
- (10) debug (fffofbfOfĀfxf<,ìŲ'è)
- (11) del (ftf@fCf<íœ)
- (12) dir (ftf@fCf<^ê—)
- (13) dirs (fffBfĀfNfgfŠfXf^fbfN,ìo—í)
- (14) echo (f[fbfZ[fW,ì•\Ž!)
- (15) exit (|—¹)
- (16) fg (ftfHfAfOf%ofEf“fhŽÀs)
- (17) for (ĀJ,è•Ô,μŽÀs)
- (18) help (fwf<fv)
- (19) history (fRf}f“fh—š—đ•\Ž!)
- (20) KeyboardLayout (fL[f}fbfvĀAIME•ïX)
- (21) kill (fvf[fZfX,ì<Ų|—¹)
- (22) let (f[fj<šĀ««•ï”“€ì)
- (23) logoff (f[fOf|ft)
- (24) md, mkdir (fffBfĀfNfgfŠì—)
- (25) mode (%æ-Ēf,[fhĀ'ĒMf|f[f,ìŲ'è)
- (26) paste (fNfŠfbvf{[fhŽóM)
- (27) path (fpfXŽQĀ•ïX)
- (28) pause (^êŽž'âŽ~)
- (29) popd (ì<ĀfffBfĀfNfgfŠ,ì•œĀ³)
- (30) PostMessage (f[fbfZ[fWf|fXfg)
- (31) printf (Ų'Ž®•t,«o—íRf}f“fh)
- (32) prompt (fvf[f“fvfg•ïX)
- (33) ps (fvf[fZfX^ê—)

- (34) pushd (□ì<ÆfffbfĀfNfgfŠ,đ•Ů'¶)
- (35) pwd (fjfcf"fgffbfĀfNfgfŠ,ì•\Ž!)
- (36) rd, rmdir (fffbfĀfNfgfŠ□í□œ)
- (37) reboot (fvfxfef€(OS)□Ä<N"®)
- (38) rem (fRf□f"fg□s,ìŽw'è)
- (39) ren (-¼'O,ì•ï□X)
- (40) restart (Windows□Ä<N"®)
- (41) SendMessage (f□fbfZ□[fW'—□o)
- (42) set (fvfxfef€ŠÂ<<•ï□"€□ì)
- (43) SetWindowPos (fEfbf"fhfE^Ê'u□Ý'è)
- (44) SetWindowText (fLffvfVf†f"-¼□Ý'è)
- (45) ShellExecute (ŠÖ~A•t,˘<N"®)
- (46) shutdown (Windows,ì□I—¹)
- (47) start (fvf□fOf%of€<N"®)
- (48) term ('Ê□M<@"\\)
- (49) test (ĀvŽŽŽ®•]‰ı)
- (50) time (Žž□□ŽQ□Æ•ï□X)
- (51) type (ftf@fCf<"à—e•\Ž!)
- (52) unalias (•Ê-¼'è<`□í□œ)
- (53) ver (fo□[fWf†f"•\Ž!)
- (54) vol (f{fŠf...□[f€f%ofxf<ŽQ□Æ)
- (55) win (WinExec, LoadModule API ,ìŽÀ□s)

(1) alias (•Ê-¼'è<`□Ý'è)

alias [name [wordlist]]
 •Ê-¼,đ'è<` ,μ"o~^ ,μ,Ü,·□B

name ; fRf}f"fh,É'î,·,é•Ê-¼
 wordlist ; fRf}f"fhfŠfXfg

alias ; •Ê-¼,ì^ê—,đ•\Ž!,μ,Ü,·
 alias name ; •Ê-¼ name ,ì"o~^□ó<μ,đ•\Ž!,μ,Ü,·□B
 alias name wordlist ; •¶Žš—ñ wordlist ,đ •Ê-¼ name ,Æ,μ,Ä"o~^ ,μ,Ü,·□B

'æ,Q^ø,«" ,É<ó"' • ¶Žš,đŽg,æê¶A^ø—p•,("),ÅŠ‡,Á,Ä,,¾,¾,çB

—á

```
>alias fd winfile
>alias custom "notepad \config.sys"
>alias ls "dir %1 /w"
```

alias ,Æ unalias ,đ•Ê-¼,É,·,é,±,Æ,Í,Å,«,Ü,¹,ñB
•Ê-¼'è` ,đííœ,·,éêê‡,Í unalias ,đ—~—p,μ,Ä,,¾,¾,çB
comwin.ini ,ì [Alias] fZfNfVf‡f“ ,ªXV,³,ê,Ü,·B

(2) cd, chdir (fffBfÇfNfgfŠ•İX)

```
cd [dir]
ffÇf“fgfffBfÇfNfgfŠ,đ•İX,μ,Ü,·B
```

(3) clip (fNfŠfbfvf{[fh'—M)

```
clip
fNfŠfbfvf{[fh,É•¶Žš—ñ,đ"]'—,μ,Ü,·B
•W€“üo—Í—p,ìRf}f“fh,È,ì,ÅA
fŠf_fÇfNfg,Æ'g,Ý‡,í,1,é,Æ•Ö—~,Å,·B
```

—á 1

```
>clip
hello world
^Z
fNfŠfbfvf{[fh,ÉfL[f{[fh“ü—Í•¶Žš—ñ,đ"]'—
```

—á 2

```
>clip < foo.txt
```

```
fNfŠfbvf{[fh,É foo.txt ,l"à—e,đ"']—
```

—á 3

```
>dir | clip
```

```
fNfŠfbvf{[fh,É dir fRf}f"fh,l"o—l,đ"']—
```

(4) cls (%œ-ÉÁŽ)

```
cls
```

```
ComWin,lNf%ofCfAf"fg%œ-É,đÁŽ,μ,Ü,·B
```

```
%ßŽ,l"o—l—š—đ,à"Žž,ÉÁ,·@"\,à, ,è,Ü,·,ì'^Ó,μ,Ä,,¾,¾,çB
```

(5) comwin (fVXfef€î•ňfRf}f"fh)

```
comwin [ver [-&env]|hwnd [-&env]|dll [args...]]
```

```
fVXfef€î•ň,đ\Ž!,μ,Ü,·B
```

```
comwin [ver [-&env]]
```

```
ver fo[fWf}f"î•ň,đ\Ž!,μ,Ü,·B
```

```
-&env ŠÂ«•İ" env ,É'ă"ü,μ,Ü,·B
```

```
comwin [hwnd [-&env]]
```

```
hwnd fRf"fl[f<,lfEfBf"fhfEfnf"fhf<,đ•Ô,μ,Ü,·B
```

```
-&env ŠÂ«•İ" env ,É'ă"ü,μ,Ü,·B
```

```
comwin [dll [args...]]
```

```
ComWin'î%žfRf}f"fhDLL,đ'¼ÚŽÀs,·,éB
```

```
>comwin dll comwins.dll dir *.*
```

```
>comwin dll cwtools.dll date
```

(6) comwins (ft [frfXfRf}f“fh)

comwins ,a' ñ<ÿ,µ,Ä,ç,éft [frfXfRf}f“fh,Å,·B
ComWin ,ì- {— ^, ÌŽiŽ|, ©, çŠO, é, Ä, ç, Ü, ·, aA
Ž,, aEÂ|“l, ÉŽg—p, µ, Ä, ç, éfRf}f“fh, ðW, ß, Ä, ç, Ü, ·B
, ±, é, ç, ÌfRf}f“fhEQ, Í ComWin ,ì%ß<ŽEÝŠ·«, Ì'ÎÜŠO, Å, ·B

(7) copy (ftf@fCf<•iŽÊ)

copy [dir1|file1] [dir2|file2]
ftf@fCf<, ð•iŽÊ, µ, Ü, ·B
f [fCf<fhfj [fh, aŽg, l, Ü, ·B
ã' , <-hŽ~, ÌŠm" Ff [fbfZ [fW, a, Å, Ü, ·B

Šm" Ff [fbfZ [fW, ðfXfLfbfv, ·, éê†, Í
ŠÅ<«•i" COPYCMD=/y , ðŽw'è, µ, Ä, , ¾, ¾, çB

(8) cttY (“üo—ÍfffofCfX, ÌØ, è'Ö, !)

ctty [con|aux]

ctty con “üo—ÍfffofCfX, ðComWin , ÌfNf%ofCfAf“fg—ì^æ, ÉY'è, µ, Ü, ·B
ctty aux “üo—ÍfffofCfX, ð'ÊMf [fg, ÉY'è, µ, Ü, ·B

mode fRf}f“fh, Å'ÊMfpf%of [f^ [, ðY'è, µ, Ä, , ¾, ¾, çB

'^Ó

'ÊMf [fg, aŽg—p, Å, «, È, çó'Ô, Ì, Æ, «, É
ctty aux , ðŽÀ[s, ·, é, Æfnf“fOfAfbfv, ·, é, Æ, «, a, , è, Ü, ·B

(9) date ("ú•tžQÆ•ïX)

date "ú•t,žQÆA,Ü,½,Í•ïX,đs,ç,Ü,·B

(10) debug (fffofbfOfÆfxf<,ìÝ'è)

debug [0|1]
fXfNfŠfvfgffofbfOžž,ìfbfZ[fWî•ñ,ìÆfxf<,đÝ'è,μ,Ü,·B

(11) del (ftf@fCf<íœ)

del file
žw'è,μ,½ftf@fCf<,đíœ,μ,Ü,·B
fCf<fhfj[fh,žg,ì,Ü,·B

(12) dir (ftf@fCf<^è—)

dir [d:|dir|file] [/W]
žw'è,μ,½fpfX,Æ^è'v,μ,½ftf@fCf<,ì^è—,đ\žì,μ,Ü,·B
fCf<fhfj[fh,žg,ì,Ü,·B
/W fCfh•žìf,fh,Â,·B

f|fvfVf#f",í /W ,μ,©, ,è,Ü,¹,ñB
'â•¶žš,Â\žì,μ,½,çê±,ÍŠÂ«•ï" DIRCMD ,É "/-|" ,đÝ'è,μ,Ä,,¾,¾,çB
DIRCMD ,É "/o" ,žSÜ,Ü,è,Ä,ç,éê±,í®—ñ\žì,μ,Ü,·B

(13) dirs (ffBfÆfNfgfŠfXf^fbfN,ìo—í)

dirs

pushd, Ā•Ů'ŕ,³,ê,½ffBfĀfNfgfŠfXf^fbfN,ì"à—e,đ□o—Í,μ,Û,·□B

ŽQ□Æ popd, pushd



(14) echo (f□fbfZ□[fW,ì•\Ž!)

echo [on|off|args]

on fGfR□[,đfif“,É,μ,Û,·□B

off fGfR□[,đfift,É,μ,Û,·□B

args ^ø□“,ÉŽw'è,³,ê,½•ŕŽš—ñ,đ□o—Í,μ,Û,·□B

fGfR□[fif“/fift,ífRf}f“fhf%ofCf“□ã,Ā,ì,Ý%oĀ“\,Ā,·□B

fofbf`ftf@fCf<,Ā echo on □ó'Ô,É,μ,½,č□ê□‡,Í□A

[ESC](frf...□[f□□[f,□[fh) ---> Option ---> Environment ,Ā

Žw'è,Ā,<,Û,·□B

,Û,½ "on" "off" ,đ□o—Í,·,é□ê□‡,Í "^^on", "^^off" ,Æ,μ,Ā,,¾,³,č□B

ŽŸ,ì•ŕŽš—ñ,đŽw'è,·,é,Æ“ĀŽê•ŕŽš,ª□o—Í,³,ê,Û,·□B

^^a fxf<

^^b fofbfNfXfy□[fX

^^c, ^^ □s--,Ā%oü□s,μ,È,č□B

^^e 0x1B

^^n %oü□s

^^r •œ<A

^^t f^fu

^^xNN "NN",đ16□i□“,É,·,é

^^^ ^'•ŕŽš

(fGfXfP□[fv•ŕŽš,Í-{—'^'^,¾,¯,Ā,·,ª□AfRf}f“fhf%ofCf“,Ā,ì

fGfXfP□[fv•ŕŽš,Æ□d•j,·,é,ì,Ā "^^",Æ“ñ,Ā'±,¯,é•K—v,ª, ,è,Û,·□B)



(15) exit (□|—¹)

exit [/p]

ComWin ,đ□|—¹,μ,Ü,·□B

ComWin ,afVfFf<,Æ,μ,Ä“o~^,³,ê,Ä,ç,é□ê□‡,Í Windows ,đ□|—¹,μ,Ü,·□B
(system.ini ,ì [boot] ,É shell=comwinx.exe ,ì<L□q,ª, ,é□ê□‡)

/p □|—¹Žž,ìŠm”Ff□fbfZ□[fW,đ□o—Í,μ,Ü,¹,ñ□B

"exit /p" ,đfGfCfŠfAfX,âftf@f“fNfVf‡f“fL□[f%of“f`ff□[,É

“o~^,·,é,±,Æ,Å-³Šm”F□|—¹,ª%oÄ“\,É,È,è,Ü,·,ª□A

Alt+F4 ,â Ctrl+SP--->C “™,ì•W□€fCf“f^□[ftfF□[fX,Å□|—¹,·,é□ê□‡,É,Í
—~—p,Å,«,Ü,¹,ñ□B,±,ì□ê□‡,Å,à-³Šm”F□|—¹,đ□s,¤•K—v,ì, ,é□ê□‡,Í□A
comwin.ini ,ì [etc] ^È%o^o,ì□s,É exit=/p ,đ’}“ü,μ,Ä,,³/4,³,ç□B

(16) fg (ftfHfAfOf%ofEf“fhŽÀ□s)

fg ‘¼’O,ìŠO•”fRf}f“fh,ª□|—¹,·,é,Ü,Å□AComWin ,ìŽÀ□s,đ’âŽ~,μ,Ü,·□B

—á

c:\>notepad ;fg

f□f,’ ,ª□|—¹,·,é,Ü,Å ComWin ,đ’Ò<@□ó’Ô,É,μ,Ü,·□B

f□fbf`□^—□,É—~—p,·,é,Æ•Ö—~ ,Å,·□B

(Ctrl+C ,ÅftfHfAfOf%ofEf“fh□^—□,đ%ođ□œ,μ,Ü,·□B)

ŽQ□Æ ftfHfAfOf%ofEf“fh<N”® ,Æf□fbfNfOf%of“fh<N”®

(17) for (ÆJ,è•Ô,μŽÀ□s)

FOR %variable IN (set) DO command [command-parameters]

```
set ,ÉŽw'è,³,ê,Ä,ç,é•¶Žš—ñ,đ %variable ,É'ã"ü,μ□A
DO ^È%º,lfRf}f"fh•¶Žš—ñ,đ'u,«Š.,| set ,ÉŽw'è,³,ê,Ä,ç,é
•¶Žš—ñ,ª,È,,Ü,é,Ü,Å□AÆJ,è•Ô,μŽÀ□s,μ,Ü,·□B
```

—á

```
>for %ext in (c h rc def) do dir *.%ext
dir *.c ; dir *.h ; dir *.rc ; dir *.def ,đŽÀ□s,·,é□B
```

(18) help (fwf<fv)

```
help
ComWin "à•",ÅfTf|□[fg,³,ê,Ä,ç,éRf}f"fh,î^ê—,đ•\Ž|,μ,Ü,·□B
"à•"fRf}f"fh,lfRf}f"fhDLL,đ□□¬,·,é,±,Æ,ÅŠg'£,Å,«,Ü,·□B
```

```
ŠÖ~A□€-Ú
CallCommand sample3.c
```

(19) history (fRf}f"fh—š—đ•\Ž|)

history [n]

```
fRf}f"fh—š—đ,đ•\Ž|,μ,Ü,·□B
n fRf}f"fh—š—đ□s□",đŽw'è,μ,Ü,·□B(-³Æø,È□□"l,ì,Æ,«,í 10□s)
```

```
hisotry fRf}f"fh,đŽg—p,·,é,½,β,É,í□AŠÂ«□Ý'èf_fCfAf□fO,Å□A
fqfXfgfŠ□[fRf}f"fh<@"\,đ ON ,É,·,é•K—v,ª, ,è,Ü,·□B
fqfXfgfŠ□[fRf}f"fh,ª—LÆø,È□ê□#□A!10, !c, !! "™ ,Å%ºβ<Ž,lfRf}f"fh,đ
ŽÀ□s,Å,«,Ü,·□B
```

```
'□^Ó history fRf}f"fh,Æfj□[f<,É,æ,éfqfXfgfŠ□[<@"\,í•Ê,à,ì,Å,·□B
history fRf}f"fh(flfvfVf#f"),í comwins.dll ,ª'ñ<Ÿ,μ□A
fqfXfgfŠ□[<@"\ (•W□€),í comwinx.exe ,ª'ñ<Ÿ,μ,Ä,ç,Ü,·□B
```

(20) KeyboardLayout (fL[f]fbfv[AIME,ì•ïX)

KeyboardLayout [IME Name|Keyboard Layout Name]

IME ,ì^ê—,đ•\Ž|,μ,Û,·B

IME ,đØ,è'Ö,|,Û,·B

fL[f{[fhfCfCfAfEfg,ì^ê—,đ•\Ž|,μ,Û,·B

fL[fo[fhfCfCfAfEfg,đØ,è'Ö,|,Û,·B

(21) kill (fvf[fZfX,ì<[S[|—¹)

kill hwnd [[hwnd2] ...]

hwnd fEfBf“fh,ìfnf“fh<

fvf[fZfX,đ<[S“l,É[|—¹,μ,Û,·B

fEfBf“fhfEfnf“fh<,í ps fRf}f“fh,ÅŽæ“³/₄,·,é,©A

fLfffvfVf†f“⁻¹/₄,Å,ì'ä'ÖŽw'è,Žg—p%oÅ“\,Å,·B

(22) let (f[fjfcŠÂ<<•ï“‘€i)

fXfNfŠfvfgftf@fCf<“à,ÅŽg—p,μ,½[ê[#A

f[fjfcŠÂ<<•ï“—ì^æ,đ'€i,·,é“_,đ,ì,¹/₄,«A

Žg—p•û-@,í set fRf}f“fh,Æ“—l,Å,·B

(23) logout (f[fOfift)

logoff

'[--, ©, çf[]OfIft, μ, Ü, ·[]B

ComWin32[]ê—p, ìfRf}f“fh, Å, ·[]B

(24) md, mkdir (fffBf[]EfnfgfŠ[]ì[]¬)

md dir

[]V, μ, fTfu[]ffBf[]EfnfgfŠ, ð[]ì[]¬, μ, Ü, ·[]B

(25) mode (%œ-Êf, [][fh[]A'Ê[]Mf[][fg, ì[]Ý'è)

(a) mode BREAK [on|off]

mode BREAK on Š,,, è[]ž, Ý, ì<-%œÂ

mode BREAK off Š,,, è[]ž, Ý, ì<ÖŽ~

mode BREAK œ»[]Ý, ìŠ,,, è[]ž, Ý[]ó'Ô

BREAK f[]f[]v[]f[]f[]f“, ì ComWin f[]V[]f[]X[]f[]e[]f[]€, Å, ì, ©, È, è[]d—v, È-ðŠ,,, ð, ì, ½, μ, Ü, ·[]B

BREAK off []ó'Ô, Å, ì[]^—[]'t, É CPU , ð“Æ[]è, ·, é, ì, Å[], μ[], '¬, É, È, è, Ü, ·[]B

BREAK on []ó'Ô, Å, ì[]o—ì[]^—[]'t, É'¼, ìf[]v[]f[]f[]Z[]f[]X, É CPU , ðŠj·ú, ·, é, ì, Å[]A

f[]}f<f`f^fXfN(Windows , ì[]š-ñ, Å<[Ž—f[]}f<f`f^fXfN)“®[]ì, ð%œÂ“\, Å, ·[]B

ffftfHf<fg, ì mode BREAK on , Å, ·[]B

(b) mode CONx string

string 'Ê[]M(COM)f{[][fg, ì[]Ý'èf[]p[]f%œf[]^[]

—á

C:\>mode COM1 9600,n,8,1

COM1 ... f[][]fg

```

9600 ... f{[fÆ[fg
n ... fpfŠfefB(e|m|n|o)
8 ... fLfff%ofNf^'.
1 ... fXfgfbfvfrfbfg

```

```

ctty ,ÅŽQ[Æ,μ,Ü,·[B
comwin.ini ,ì [Auxiliary] fZfNfVf#f“ ,ª[‘ ,«Š· ,! ,ç ,ê ,Û ,·[B

```

(c) mode CON FONT facename

```

facename ftfHf“fg,ì[‘ì-¼

```

(d) mode DOS [0|1|2|3]

```

0 ... Šg'£fRf“f[<,ð•ÊfEfBf“fhfE,ÅŽÀ[s,μ,Ü,·[B
1 ... Šg'£fRf“f[<,ì[o—í,ðŽæ,è[ž,Ý,Û,·[B
2 ... Šg'£fRf“f[<,Æ VxD ,ð%oî,μ,Ä“ü[o—í,ð“~Šú,3,1,Û,·[B
3 ... Šg'£fRf“f[<,Æftf@fCf<fnf“fhf<,ð%oî,μ,Ä“ü[o—í,ð“~Šú,3,1,Û,·[B

```

(26) paste (fNfŠfbfvf{[f[fhŽó[M)

```

paste
fNfŠfbfvf{[f[fh,©,ç,ì•¶Žš—ñ,ðŽó,~Žæ,è[o—í,μ,Û,·[B

```

(27) path (fpfXŽQ[Æ•ï[X)

```

path [[dir1[;dir2]...]
fRf}f“fh,ìfT[f`fpfX,ì[Ý'è(dir1[;dir2]...)
,Û,½,í•\Ž!,ð[s,ç,Û,·[B

```

```

—á
c:>path

```

```
c:\;c:\dos;c:\windows
c:>path c:\bin;c:\usr\bin;c:\local\bin
```

(28) pause (^êŽž'âŽž~)

pause

```
ŽŸ,lfRf}f"fh,ðŽÀ[s,·,é'O,É^êŽž'âŽž~,μ,Ü,·B
,½,¾,μ'¼'O,lfRf}f"fh,ÍfofbfNfOf%ofEf"fh,ÅŽÀ[s,³,ê,Ä,ç,Ü,·B
```

```
pause fRf}f"fh,lfvf"fvfg^È~ ,É Ctrl+'C' fR[fh,ª
ŠÜ,Ü,ê,Ä,ç,éê±Afofbf`ftf@fCf<"à,ÅŽÀ[s'tŽž~^—,ª,Å,«,Ü,·B
```

—á

```
c:\>winmine
```

```
c:\>pause
```

```
c:\>sol ;pause
```

```
fofbf`ftf@fCf<"à,âftfBf<f^—Žž,É—~—p,·,é,Æ•Ö—~,Å,·B
('^Ó...pause fRf}f"fh,Í ComWin ver 1.50 ,©,ç<@"\,ðk—,μA
ftfHfAfOf%ofEf"fh^—,ð[s,í,È,,È,è,Ü,μ,½B
ftfHfAfOf%ofEf"fh^—,ª•K—v,Èê±,Í fg fRf}f"fh,ð—~—p,μ,Ä,,¾,³,çB)
```

ŽQÆ ftfHfAfOf%ofEf"fh<N"®,ÆfofbfNfOf%of"fh<N"®

(29) popd (ì<ÆfffBfÆfNfgfŠ,ì•œÆ³)

popd

```
fffBfÆfNfgfŠfXf^fbfN,ìœ"ª,ðíœ,μA
ì<ÆfffBfÆfNfgfŠ,ð,Q"Ô-Ú,lfGf"fgfŠ,É•ïX,μ,Ü,·B
```

ŽQÆ dirs, pushd

(30) PostMessage (f\fbfZ[fWf]fXfg)

(a) PostMessage hwnd message wParam lParam

-,í

(b) PostMessage -w message wParam lParam hwnd

hwnd fEfBf"fhfEfnf"fhf<

message f\fbfZ[fW"Ó†

wParam Šef\fbfZ[fW,É'í%ž,μ,½,QfofCfg@"

lParam Šef\fbfZ[fW,É'í%ž,μ,Ä,SfofCfg@"

PostMessage API ,đ'¼ÚCEÄ,Ño,μ\fbfZ[fW,đŠefEfBf"fhfE,É'—o,μ,Ü,·B

,±,ìfRf}f"fh,đŽg—p,·,é,±,Æ,Å"Ä—p"l,ÉfEfBf"fhfE'€ì,ªs,ì,Ü,·B

fEfBf"fhfEfnf"fhf<,í ps fRf}f"fh,ÅŽæ"¾,·,é,©A

fLffvfVf†f" -¼,Å,ì'ã'ÖŽw'è,ªŽg—p%Å"\,Å,·B

(a) ,í Windows ,ì PostMessage API ,Æ"~,¶CEÄ,Ño,μ†~ ,Å,·B

(b) ,í alias "o~^,·,é,ì,É•Ö—~,ÈCEÄ,Ño,μ†~ ,Å,·B

—á

C:\>alias maximized "PostMessage %1 112 F030 0"

C:\>alias minimized "PostMessage %1 112 F020 0"

C:\>alias restore "PostMessage %1 112 F120 0"

C:\>ps

HWND TASK INST TITLE

194C 1497 1446 fvf\fof%of€f}f\ff

C:\>maximized 194C <--- fvf\fof%of€f}f\ff,đÅ'á%»

C:\>minimized 194C <--- fvf\fof%of€f}f\ff,đAfCfRf"%»

C:\>restore 194C <--- fvf\fof%of€f}f\ff,đ•æE³

C:\>maximized "[ftf@fCf< f}f\ff]"

C:\>minimized "[ftf@fCf< f}f\ff]"

C:\>restore "[ftf@fCf< f}f\ff]"

PostMessage ,lfpf%of[]f^,í SDK ,đŽQ[]l,É,μ,Ä,,¾,¾,ç[]B

(31) printf(□'Ž®•t,«□o—lfRf}f“fh)

printf format [env1 env2 ...]

format printf ,l□'Ž®Žw'è,l□"•ª,Å,·[]B(CÆ¾¾Æê,lprintf,É[]€,¶,Ü,·[]B)
env1 ... □'Ž®,Å—~—p,·,é•i□"•"•ª,Å,·[]B(fvfXfef€ŠÂ««•i□",ÅŽw'è,μ,Ü,·[]B)

—á

set value=65

printf "^%c ^%d ^%X ^%s" value value value value

---> A 65 41 65

('%' ,íŠÂ««•i□"^^ø—p•,,È,l,Å '^' ,ÅfGfXfP[]fv,·,é•K—v,ª, ,è,Ü,·[]B)

(32) prompt (fvf[]f“fvfg•i□X)

prompt [text]

fRf}f“fhfvf[]f“fvfg,l□•¶Žš—ñ,đ text ,É•i□X,μ,Ü,·[]B

ŽŸ,l“ÁŽê•¶Žš,ªŽg—p,Å,«,Ü,·[]B

\$Q ... '='

\$\$... '\$'

\$P ... fjfÆf“fgfhf%ofCfu[]AfpfX

\$N ... fjfÆf“fgfhf%ofCfu

\$G ... '>'

\$L ... '<'

\$B ... '|'

\$H ... fofbfNfXfy[]fX

\$_ ... %oü[]s

\$E ... ESCfR[]fh

Šù'è'l,í \$P\$G ,Å,·

```

prompt fRf}f“fh,íì<Æ—ì^æ,â•Û‘¶—ì^æ,Æ,μ,Ä INI ftf@fCf<,É
fvf[]f“fvfg•¶Žš—ñ,ð‘,«[]ž,Ý,Û,·BINI ftf@fCf<“à,Å“ÁŽê•¶Žš,Æ,μ,Ä
^μ,í,ê,Ä,ç,é•¶Žš,ð—~—p,·,é[]ê[]‡,í’[]^Ó,ª•K—v,Å,·[]B
<t,É,» ,ê,ð[]ì<É“l,É—~—p,·,é•û-@,à, ,è,Û,·[]B
prompt $p$g % ,ÆŽw'è,·,ê,î[]A[]o—íC<%oÊ,í c:\windows> command ,Æ
,È,è[]A--“ö,É<ó”’,ª’Ç%oÁ,³,ê,Û,·[]B
prompt %% ,ÆŽw'è,·,ê,î[]A[]u%[]v,ªfvf[]f“fvfg,É,È,è,Û,·[]B

```

'[]^Ó C>fo[][fWf‡f“ ,Å,ÍŠÂ<«•ï[]” PROMPT ,íŽQ[]Æ,μ,Û,¹,ñ[]B



(33) ps (fvf[]fZfX^ê—)

```

ps
C>»[]ÝŽÀ[]s't,ìfvf[]fZfX,ì^ê—,ð•\Ž!,μ,Û,·[]B

```

—á

```

C:\WIN\COMWIN>ps
HWND TASK INST COMMAND TITLE
12D8 1F37 1ED6 msime MSIMEServer
26A0 19C7 198E comwinx ComWin Ver. 3.51j
2D18 1A77 2D6E winword Microsoft Word - README.DOC
2410 1A77 2CA6 olesvr Srvr
194C 14E7 1496 progman fvf[]fOf%of€ f}f[][fWff
1F90 1D67 1D3E drwatson f[]fgf“”ŽŽm
20F0 1CD7 1C46 winoa386 MS-DOS fvf[]f“fvfg
3768 276F 2416 winhelp Windows 3.1 SDKfwf<fv

```

```

HWND fEfBf“fhfE,ìfnf“fhf<
TASK f^fXfN,ìfnf“fhf<
INST fCf“fXf^f“fX,ìfnf“fhf<

```

fEfBf“fhfE,ìfnf“fhf<,í kill ,â SendMessage ,ÅŽg—p,μ,Ä,,¾,³,ç[]B

(34) pushd (řìĀĚffBfĚfNfgfŠ,đ•Ů'ŕ)

pushd [directory]

Ě»ŕŸ,řìĀĚffBfĚfNfgfŠ,đffBfĚfNfgfŠfXf^fbfN,É•Ů'ŕ,μĀA
ŕV,μ,řìĀĚffBfĚfNfgfŠ,đ directory ,É•řĀX,μ,Ů,·ĀB

ŠĀ«•řĀ",É pushdcmd=unix ,ĚŽw'è,·,é,Ě
fpf%ofĀĀ[f^Ā[-³Žw'èŽž,ÉffBfĚfNfgfŠfXf^fbfN,ř
1"Ō-Ů,Ě2"Ō-Ů,řffBfĚfNfgfŠ,đĚđŠ,μ,Ů,·ĀB

ŽQĀĚ dirs, popd

(35) pwd (řřĚf"fğffBfĚfNfgfŠ•\Žř)

pwd

řřĚf"fğffBfĚfNfgfŠ,đ•\Žř!,μ,Ů,·ĀB

(36) rd, rmdir (řffBfĚfNfgfŠřřĀœ)

rd dir

Žw'è,μ,½<ó,«řffBfĚfNfgfŠ,đřřĀœ,μ,Ů,·ĀB

(37) reboot (řVfXfef€(OS)řĀĀN"®)

reboot [/p]

Windows ,đřĀ—¹,řVfXfef€,đřřZfzfbfg,μ,Ů,·ĀB

/p Šm" Ff fbfZ [fW,đ o—í,μ,Ü,¹,ñ B

(38) rem (fRf f"fg s,ìžw'è)

rem [comment]
fRf f"fg s,đžw'è,μ,Ü,· B

(39) ren (-¼'O,ì•ĩ X)

ren file1 file2
file1 ,ì-¼'O,đ file2 ,É•ĩ X,μ,Ü,· B
ftf@fCf<"à—e Aftf@fCf<,ìf^fCf€fXf^f"fv,í•ĩ X,μ,Ü,¹,ñ B

(fvf fOf%of€èì¬,ì"i^Œ"x AŽÀ—p«,©,ç I,¡,Ä A
ftf@fCf<-¼,ÉfffBf€fNfgfŠ-¼,đŠÜ,ß,é,±,Æ,í
<@"\,©,ç,í,,μ,Ü,μ,½ B)

(40) restart (Windows Ä<N"®)

restart [/p]
Windows ,đ I—¹,μ Ä<N"®,μ,Ü,· B

/p Šm" Ff fbfZ [fW,đ o—í,μ,Ü,¹,ñ B

(41) SendMessage (f fbfZ [fW'—o)

(a) SendMessage hwnd message wParam lParam
-",í

(b) SendMessage -w message wParam lParam hwnd

```
hwnd hWnd "SendMessage"
message WM_CLOSE
wParam 0
lParam 0
```

SendMessage API, wParam, lParam, hwnd, message, flags

SendMessage, wParam, lParam, hwnd, message, flags

(a) SendMessage API, wParam, lParam, hwnd, message, flags

(b) SendMessage API, wParam, lParam, hwnd, message, flags

—á

```
C:\>alias maximized "SendMessage %1 112 F030 0"
```

```
C:\>alias minimized "SendMessage %1 112 F020 0"
```

```
C:\>alias restore "SendMessage %1 112 F120 0"
```

```
C:\>ps
```

```
HWND TASK INST TITLE
```

```
194C 1497 1446 fvfOf%€f}f[fWff
```

```
C:\>maximized 194C <--- fvfOf%€f}f[fWff,ð'á'á»
```

```
C:\>minimized 194C <--- fvfOf%€f}f[fWff,ðfAfcRf"»
```

```
C:\>restore 194C <--- fvfOf%€f}f[fWff,ð•œ³
```

SendMessage, wParam, lParam, hwnd, message, flags

PostMessage, hWnd, wParam, lParam, message, flags

```
PostMessage = WM_CLOSE
```

```
SendMessage = "d~b" `
```

```
SendMessage, wParam, lParam, hwnd, message, flags
```

SendMessage, wParam, lParam, hwnd, message, flags

SendMessage, wParam, lParam, hwnd, message, flags

'Ê□í,í SendMessage ,ÍŽg—p,¹,□APostMessage ,đŽg—p,·,é,±
,Æ,đŠ©,ß,Ü,·□B

(42) set (fvfXfef€ŠÂ<<•ï□"“€□i)

```
set [name=[string]]
set @ expression
ŠÂ<<•ï□",ì□Ý'è(name=string)□A
□í□œ(name=)□A^ê—,đ•\Ž|,μ,Ü,·□B
fvf□"fvfg(name)□A•W□€“ü—í,©,ç,ì“ü—í,đ<□,ß,Ü,·□B
ÆvŽŽŽ®(@ expression)□AÆvŽŽŽ®,đ•]‰,μŠÂ<<•ï□",É'ă“ü,μ,Ü,·□B
```

```
'□^Ó
DOS ,ì□ê□# name ,í'â•¶Žš,É•İŠ·,³,ê,é,ì,Å,·,ª□A
ComWin ,ì□ê□#□A'â•¶Žš□A□→•¶Žš,đ<œ•Ê,μ,Ü,·□B
fT□[f' fpfX,đ•İ□X,·,é,Æ,«,ÍŽŸ,ì,œ,α,É,μ,Ä,,¾,³,¢□B
c:>set PATH=c:\dos <--- □³
c:>set path=c:\dos <--- Āë
```

ŽQ□Æ fXfNfŠfvfgfŠftf@fÆf“fX

(43) SetWindowPos (fEfBf“fhfE^Ê'u□Ý'è)

SetWindowPos hwnd hwndInsertAfter x y cx cy fuFlags

```
hwnd          fEfBf“fhfEfnf“fhf<
hwndInsertAfter ^Ê'ufnf“fhf<
x              □...•½^Ê'u
y              □,¼^Ê'u
cx             •□
cy             □,,³
```

fuFlags ftf%ofO

hwndInsertAfter ,íŽŸ,ì'l,đŸ'è,μ,Ä,,¾,³,çB
 Å%o^Ê^Ê'u 1AÅã^Ê^Ê'u 0A
 í,ÉŽè'O•Ž!Ÿ'è -1Aí,ÉŽè'O•Ž!%ođœ -2

fuFlags ,íŽŸ,ì'l,đ OR ,Å'g,Ý,í,¹,Ä,,¾,³,çB
 0001 fTfCfY,đ•ïX,μ,È,ç
 0002 ^Ú"® ,μ,È,ç
 0004 Z-f[f_][,đ•ï,],È,ç
 0008 Ä•`%oæ,μ,È,ç
 0010 fAfNfefBfu,É,μ,È,ç
 0020 ~g,đ•`%oæ,·,é
 0040 fEfBf"fhfE,đ•Ž!,·,é
 0080 fEfBf"fhfE,đ"ñ•Ž!,É,·,éB

fEfBf"fhfEfnf"fhf<,í ps fRf}f"fh,ÅŽæ"¾,·,é,©A
 fLfffvfVf#f" -¼,Å,ì'ã'ÖŽw'è,Žg—p%oÅ"\,Å,·B

—á

>SetWindowPos "[ŽžŸv]" -1 0 0 0 3
 ŽžŸv,đŸ,ÉŽè'Oó'Ô,É,·,éB
 >SetWindowPos "[fvfOf%of€ f}f[fWff]" 0 0 0 640 480 0
 fvfOf%of€f}f[fWff,ì^Ê'u,đ(0,0),É,μA'ã,<,³,đ(640,480),É,·,éB



(44) SetWindowText (fLfffvfVf#f" -¼Ÿ'è)

SetWindowText hwnd string

hwnd fEfBf"fhfEfnf"fhf<
 string Ÿ'è,·,é•Žš—ñ
 fLfffvfVf#f" -¼,đŸ'è,μ,Ü,·B

fEfBf"fhfEfnf"fhf<,í ps fRf}f"fh,ÅŽæ"¾,·,é,©A

fLfffvfVf#f" -¼,Å,ì'ä'ÖŽw'è,Žg—p%oÅ"\,Å,·B

ŠefAfvfŠfP[fVf#f" ,ìfLfffvfVf#f" -¼,đ
ft[fU[,ì^μ,ç,â,·,çfLfffvfVf#f" -¼,É•ïX,Å,«,Ü,·B

—á

c:\>SetWindowText "[fvf[fOf%of€ f}f[fWff]" "Program Manager"

'^Ó fLfffvfVf#f" -¼,É'~ìCE •\Ž|,ì, ,éfAfvfŠ"™ ,Í•s—p^Ó,É•ïX,·,é,Æ
'~ìCE ,ÉG,ê,éêê# ,â ,è,Ü,·BŠefAfvfŠ,ìf}ffj...fAf<,É],Á,Ä,,¾,¾,çB

(45) ShellExecute (ŠÖ~A•t, <N"®)

ShellExecute hwnd Op File Params Dir ShowCmd

fAfvfŠfP[fVf#f" ,ìUx,ÈŠÖ~A•t, <N"® ,đs,ç,Ü,·B

hwnd : fEfBf"fhfEfnf"fhf<A'Éí,Í 0 ,đŽw'è,μ,Ä,,¾,¾,çB

Op : <N"®'€ìA'Éí,Í 0 ,đŽw'è,μ,Ä,,¾,¾,çB

File : <N"®ftf@fCf<-¼

Params : <N"®ftf@fCf<-¼,É"n,^ø"

Dir : <N"®ŽŽ,ìffBfCEfNfgfŠ

ShowCmd : <N"®ó'ÔB

[Op] <N"®'€ì,ì—á

"open" or "print" or "0"

[ShowCmd] <N"®ó'Ô,ì—á

SW_SHOWNORMAL : 1

SW_SHOWMINIMIZED : 2

SW_SHOWMAXIMIZED : 3

—á,ì,ìAalias ,ÅŽŸ,ì,æ,π,ÉŽw'è,·,ê,îA

>alias sh "ShellExecute 0 0 %1 ^"%3 %4^" ^" %2^" 1"

>sh exefile [directory [argument]]

,Æ,ç,π<N"®fffBfCEfNfgfŠŽw'è,Å,«,ìf%of"f`ff[fRf}f"fh,ŽÀCE»,Å,«,Ü,·B

(46) shutdown (Windows, l—1)

```
shutdown [/p]
Windows fVfXfef€ ,đfVfffbfgf_fEf“ ,μ,Ü,·B
Windows ,đl—1,³,¹,Ü,·B
```

```
/p Šm”Ff fbfZ[fW,đo—Í,μ,Ü,¹,ñB
```

(47) start (fvf fOf%of€<N“ ®)

```
start [/wait] exefile [arg0 [...]]
```

```
exefile ,ÅŽw’è,³,ê,½fvf fOf%of€ ,đ<N“ ® ,μ,Ü,·B
/wait ... fvf fOf%of€ ,đftf@fAfOf%ofEf“fh,Å<N“ ® ,μ,Ü,·B
```

(48) term (’ÊM<@“\)

```
term [filename]
```

```
filename ’è<`ftf@fCf<-¼,đŽw’è,μ,Ü,·B
term fRf}f“fh,đŽÀs,·,é,Æê—pfRf}f“fh“ü—Íf,□[fh,É“ü,è,Ü,·B
^È%º,İTfufRf}f“fh,ª—~—p,Å,«,Ü,·B
! [command] ; ComWin ,İfRf}f“fhŽÀs,·,é
!![string] ; •¶Žš—ñ,đff□[f^□[ ,Æ,μ,Ä^μ,κ
!close ; ’ÊMf□[fg,đ•Â,¶,é
!code {S|JIS|EUC} ; •¶ŽšfR□[fh,đÝ’è,·,é
!download filename ; Žw’èftf@fCf<,đXMODEM(128/SUM),ÅŽóM,·,é
!exit ; ’ÊMfRf}f“fh,đl—1,·,é
!help ; fRf}f“fh^ê—,đ•Ž|,·,é
!load filename; fefLfXfgftf@fCf<,đf□□[fh,·,é
```

```

!log filehead ; 'ÊMfO-¼,đŽw'è,·,é
!open [COMn] ; Žw'è,³,ê,½'ÊMf|[]fg,đŠ),
!password ; fpfXf[]fh—p,ì“ü—Í{fbfNfX,đŠ),
!set ; []Ý'èf_fCfAf[]fO,đŠ),
!speed COMm ; 'ÊMfpf%of[]f^[],đ[]Ý'è,·,é(m=1,2,3,4)
!speed COMm [baud=b] ; '¬“x(b=100-19200)
!speed COMm [parity=p] ; fpfŠfefB(p=n,e,o,m,s)
!speed COMm [data=d] ; ff[]f^'·(d=5,6,7,8)
!speed COMm [stop=s] ; fXfgfbfvfrfbfg(1,1.5,2)
!speed TELNET [host=hostname] ; fzfXfg-¼,đŽw'è,·,é
!speed TELNET [port=12] ; fzfXfg,ìf[]fg,đŽw'è,·,é
!tel number; “d~b,·,é
!time ; 'ÊMCEo%oßŽžŠÔ,đ•\Žì,·,é
!upload filename ; Žw'èftf@fCf<,đXMODEM(128/SUM),Á'—[]M,·,é
!wait string ; string ,ÁŽw'è,μ,½•¶Žš—ñ,đŽó[]M,·,é,Ü,Á'Ò,Á

```

```
fRf}f“fh,ì[]Ú[]x
```

```

! [command] ; ComWin ,ìfRf}f“fhŽÀ[]s,·,é
'ÊMf,[]fh,ì,È,©,©,ç ComWin ,ìfRf}f“fh,ªŽÀ[]s,Á,«,Ü,·[]B
! ,ìŽŸ,É ' '(<ó"') ,ª•K—v,Á,·[]B

```

```

!![string] ; •¶Žš—ñ,đff[]f^[],Æ,μ,Ä^μ,α
!! , ,Æ,É'±,ç,½•¶Žš—ñ,í'Êí,ìff[]f^[],Æ,μ,Ä^μ,ç,Ü,·[]B
'!' ,đff[]f^[],Æ,μ,Ä“n,μ,½,ç[]ê[]# "!!!" ,Æ,·,é,±,Æ,Á%oÁ"\,Á,·[]B

```

```

!load filename; fefLfXfgftf@fCf<,đf[]fh,·,é[]B
“dŽqf[]f<“™,đ'—[]M,·,é,Æ,«“™,É
fffBfXfNã,ìfefLfXfgftf@fCf<,đŽw'è,μ,Ü,·[]B

```

```

!log filehead ; 'ÊMfO-¼,đŽw'è,·,é
f[]fO,Æ,μ,Ä•Û'¶,·,éftf@fCf<-¼,ì[]æ“ª•¶Žš,đŽw'è,μ,Ü,·[]B
ŽÀ[]Û,ìftf@fCf<-¼,É,í'ÊMŽž,ì“ú•t,ª'Ç%oÁ,³,ê,Ü,·[]B
(—á)
NF ---> NF960720.LOG
NIFTY ---> NIFTY720.LOG
C:\COMWIN\NF ---> C:\COMWIN\NF960720.LOG

```

!password ; fpfXf[fh—p,ì“ü—Íf{fbfNfX,đŠJ,
'Êí,ì'ÊMf\ftfg,í“ü—í•¶Žš,đ,»,,ì,Ü,ÜfzfXfg,É'—,è,Ü,·,ªA
ComWin ,ìê¶,Íf%ofCf“fofbftf@,É^êŽž“l,É'~,,ç,ê,Ü,·B
,μ,½,ª,Á,ÄfpfXf[fh“™ ,ìGfR[fofbfN,μ,½,,È,ç•¶Žš—ň,đ
“ü—í,·,é,Æ,«,,ÉŽg—p,μ,Ü,·BÈ—ªEn,í !p ,Å,·B

!tel number; “d~b,·,é
Žw'è,μ,½“d~b”Ô†,Å“d~b,μ,Ü,·B,½,¾,μfg[f“%ňü,ì,Ý,Å,·B
fpfX%ňü,đŽg—p,·,é,Æ,«,,É,í
ATDP “™ ,ì AT fRf}f“fh,đŽg—p,μ,Ä,,¾,¾,çB

!time ; 'ÊMCEo%ßŽžŠÔ,đ•Žì,·,é
'ÊM%ňü,đŠJ,ç,Ä,©,ç,ìCEo%ßŽžŠÔ,đ•Žì,·,éB

('^ÓŽ-€)

fo[fWf#f“fAfbfvft[fU[.ìê¶ffftfHf<fg,Å,í—~—p,Å,«,,Ü,¹,ňB
uŠg'£fRf}f“fhDLLv,ìÝ'è,Å comwint.dll ,đ“o~^,μ,Ä,,¾,¾,çB
(32bit “Å,í comwtrm.dll)
,Ü,½Acomwin.ini ,ì [CommandDII] ,É comwint.dll=CallCommand,đ
¶,«ž,þ,±,Æ,Å,àŽg—p%Å“\,É,È,è,Ü,·B
(32bit “Å,í comwin32.ini [CommandDII] comwtrm.dll=CallCommand)

term fRf}f“fh,đŽÀs,μ,½ó'Ô,ì,Ü,Ü,Å ComWin ,đl—¹,¾,¹,È,ç,Å,,¾,¾,çB
,Ü,½A•;¶” ,ì ComWin ,©,ç“~Žž,É term fRf}f“fh,đŽg—p,μ,È,ç,Å,,¾,¾,çB
fVfXfef€,ª•s^À'è,É,È,è,Ü,·B

(49) test (EvŽŽŽ®•)%ž

test expression
expression ,đ•)%ž,μAŠÂ«•Ī” status ,É
^,Å ,ê,î 0 ,đ <U,Å ,ê,îA1 ,đ“ü,·,éB

ŽQÆ fXfNfŠfvfgfŠftf@fCf“fX

(50) time (ŽžQÆ•iX)

time

ŽžQÆA,Ü,½,í•iX,ðs,ç,Ü,·B

(51) type (ftf@fCf<“à—e•\Ž!)

type file

ftf@fCf< file ,ì“à—e,ð•\Ž!,μ,Ü,·B

(32bit“Å) Unicode fefLfXfgftf@fCf<,à•\Ž!,μ,Ü,·B

(52) unalias (•Ê-¼’è`íœ)

unalias strings

Žw’è,μ,½•Ê-¼ strings ,ð-³œø,É,μ,Ü,·B

unalias *

,,x,Ä,ì•Ê-¼,ð-³œø,É,μ,Ü,·B

comwin.ini ,ì [Alias] fZfNfVf#f“ ,³XV,³,ê,Ü,·B

(53) ver (fo[fWf#f“•\Ž!j

ver

comwin.dll ,ì fo[fWf#f“”Ôt,ð•\Ž!,μ,Ü,·B

(comwinx.exe ,ì fo[fWf#f“ ,ífLfffvfvf#f“ ,É•\Ž!,³,ê,Ü,·B)

(54) vol (f{fŠf...[f€f%ofxf<ŽQ[Æ)

vol [drive]

drive ,ÅŽw'è,μ,½fhf%ofCfu,ì

f{fŠf...[f€f%ofxf<,đŽQ[Æ,μ,Û,·[B

(55) win (WinExec, LoadModule API ,ìŽÀ[s)

win [/e] [/Sn] exefile [option]

exefile ,đ n ,ìó'Ô,Å WinExec API ,đŽg,ç<N"® ,μ,Û,·[B

(/e ,đŽw'è,μ,½[ê[†,í LoadModule API ,đCEÄ,Ñ[o,μ,Û,·[B

,±,ì[ê[†[ÅŠ«•ì" ,ªŽqfvf[fZfX,ÉCEp[³,³,ê,Û,·[B)

n ,ìó'Ô'l,ífXf^[fgfAfbfv<@"\,Å[à-¾,μ,Ä,ç,é,ì,Æ" ,¶'l,Å,·[B

—á

win sol f{fŠfefBfA,đ'É[í,ìó'Ô,Å<N"® ,·,é[B

win /s1 sol " [ã

win /s3 sol f{fŠfefBfA,đ[Å'â%» ,Å<N"® ,·,é[B

win /s6 sol f{fŠfefBfA,đfAfCfRf"%» ,Å<N"® ,·,é[B

ComWin ver 1.40 ,©,ç[V[Ý,³,ê,½fRf}f"fh,Å,·[B

ComWin ,í DOSfvf[Of%of€[AComWin—pfofbf`ftf@fCf<,đŠÇ—[,·,é•K—v,ª

, ,é,ì,Å[A<N"®'O,ÉŽÀ[sftf@fCf<,ìCE`Ž®(DOS, WIN, WIN32S"™),đ

[í,Éf`fFbfN,μ,Ä,ç,Û,·[B

,μ,©,μ[A[ìŽÒ,ì[à—í,©,ç"¾,ç,ê,é[í•ñ,Å,í

"ñCEöŠ],ìfwfbf_[,đŽ[,Á,½ŽÀ[sftf@fCf<,·,x,Ä,É'î%ž,·,é,ì,í•s%»Å"\,Å[A

ŽÀ[sftf@fCf<,ìŽí•É,đCEë"FŽ` ,·,é[ê[†,ª[í,|,ç,ê,Û,·[B

"ñ[í—p,ìRf}f"fh,Æ,μ,Ä,à—~—p,μ,Ä,,¾,³,ç[B

(CE»[Ý[A[ìŽÒ,ì'm,è,æ,é,à,ì,Å,í[AEXCEL4 ,¾, ,ªŠY"—,μ,Û,·[B

EXCEL5 ,í[³[í,É"FŽ` ,μ,Û,·,ì,Å[AEXCEL4 ,ì"ÁŽê[« ,ªCE'^ö,¾,ÆŽv,ç,Û,·[B

ComWin ver 1.30 —p,É—p^Ó,³,ê,½ comwine.dll ,đŽg—p,μ,Ä,ç,é•û,í

comwine.dll ,đříœ,μ,ÄAcomwin.ini ,©,ç
comwine.dll=CallCommand ,ìs,đříœ,μ,Ä,,¾,³,çB)

ŽQÆ fXf^[fgfAfbfv<@"\
ŠÂ«•ï"fT[fo[<@"\

(fRf}f"fh•â'«)fLfffvfvf‡f"-¼,Å,ì'ã'ÖŽw'è,É,Â,ç,Ä

Windows ,í fEfBf"fhfEfnf"fhf<,đ—p,ç,ÄfEfBf"fhfE'€ì,đs,α,ì,Å,·,ªA
fEfBf"fhfEfof"fhf<,í 16bit ,ì"Žš,Å ,è
,μ,©,àA<N"® ,μ,½ŠÂ«,É,æ,Á,Ä•ï%» ,·,é,à,ì,È,ì,ÅA
fRf}f"fhf%ofCf" ,©,ç^μ,α,ì,í"ňí,É•s•Ö,Å,·B

,»,±,Å ComWin ,Å,ífLfffvfvf‡f"-¼,đŽw'è,·,é,±,Æ,Å
fEfBf"fhfEfnf"fhf<,ì'ã'ÖŽw'è,đ%Å"\,É,μ,Û,μ,½B
u"[fLfffvfvf‡f"-¼]"v ,Æ,·,é,±,Æ,ÅÅ% ,ÉŠY"- ,·,éEfBf"fhfE,đŽw'èB
u"{fLfffvfvf‡f"-¼}"v ,Æ,·,é,±,Æ,ÅŠY"- ,·,é'S,Ä,ífEfBf"fhfE,đŽw'èB

12. f... [Šftf@fÆf“fX

- (1) Save Log (•\Ž!Æ<%oÊ,ì•Û‘¶)
- (2) Command DLL (fRf}f“fhDLL,ìŸ’è)
- (3) Apps (fAfvfŠfP[fVf#f“ ,ì<N“®)
- (4) Exit (|—¹)
- (5) Cut (fNfŠfbfvf{[fh,Ö,ì^Ú“®)
- (6) Copy (fNfŠfbfvf{[fh,Ö,ìRfs[[])
- (7) Paste (fNfŠfbfvf{[fh,©,ç,ìRfs[[])
- (8) View (•\Ž!Ÿ’è)
- (9) Environment (ŠeŽíŠÂ<<Ÿ’è)
- (10) DOS Command (DOSfRf}f“fh,ìŸ’è)
- (11) Launcher (ftf@f“fNfVf#f“fL[f%of“f`ff[[],ìŸ’è)
- (12) Font (ftfHf“fg,ìŸ’è)
- (13) Color (F,ìŸ’è)
- (14) Key assign (fL[Š,,,è“- ,Ä,ìŸ’è)
- (15) Arguments (fVfFf<<N“®Žž^ø“,ìŸ’è)
- (16) Save Setting (ŠeŽíŸ’è,ì•Û‘¶)
- (17) Contents (f|f“f%ofCf“fwf<fv)
- (18) About (ComWin,É,Â,ç,Ä)

- (1) Save Log (•\Ž!Æ<%oÊ,ì•Û‘¶)

ComWin ,Éo—í,³,è,½%oß<Ž,ì•\Ž!Æ<%oÊ,đftf@fCf<,É•Û‘¶,μ,Û,·B
%oß<Ž,ì—š—đ,í500s,Û,Å•Û‘¶,Å,«,Û,·B

- (2) Command DLL (fRf}f“fhDLL,ìŸ’è)

Command DLL ,ìŸ’è,đs,ç,Û,·B
“®“f[[]fh[]A[]#[]~,ì•ì[]X[]A•Û‘¶“™ ,æ%oÂ“\,Å,·B

(3) Apps (fAfvfŠfP[fVf‡f“ ,ì<N“ ®)

fvf[fOf%of€f}fI[fWff,âf^fXfNfo[,É“o~^ ,³,ê,Ä,ç,évf[fOf%of€,ð
f[fjf...[[€-Ú,ì't,©,ç<N“ ®,μ,Û,·B

(4) Exit (□I—¹)

ComWin ,ð□I—¹,μ,Û,·B
ComWin ,âfvfFfç,Æ,μ,Ä“o~^ ,³,ê,Ä,ç,é[ê[‡,ÍWindows ,ð□I—¹,μ,Û,·B
(system.ini ,ì [boot] ,É shell=comwinx.exe ,ì<L□q,ª, ,é[ê[‡)

(5) Cut (fNfŠfbvf{[fh,Ö,ì^Ú“ ®)

fRf}f“fhf%ofCf“ ,ì'l'ð•¶Žš—ñ,ðfNfŠfbvf{[fh,É^Ú“ ®,μ,Û,·B

(6) Copy (fNfŠfbvf{[fh,Ö,ìRfs[)

fRf}f“fhf%ofCf“ ,ì'l'ð•¶Žš—ñ,â
%oß<Ž,ì•\Ž|CE<%oÊ,ðfNfŠfbvf{[fh,ÉfRfs[,μ,Û,·B
%oß<Ž,ì—š—ð,í500□s,Û,Å•Û'¶,Å,« ,Û,·B

(7) Paste (fNfŠfbvf{[fh,©,ç,ìRfs[)

fRf}f“fhf%ofCf“ ,ÉfNfŠfbvf{[fh,ì•¶Žš—ñ,ðfRfs[,μ,Û,·B

(8) View (•\Ž!□Ý'è)

- * 3-D (—§'ì%»)f_fCfAf□fO,ÉŽg—p,·,é DLL ,đŽw'è,μ,Ü,·□B
Žg—p,¹,_□Actl3d.dll□Actl3dv2.dll ,ì,R,Â,©,ç'I,Ñ,Ü,·□B
comwin.ini [Accessory] ,²□X□V,³,é,Ü,·□B
- * fRf“f□[f<CE...□”,ì□Ý'è
□Á'â□Ü,è•Ô,μCE...□”,Æ□Á□¬□Ü,è•Ô,μCE...□”,đŽw'è,·,é,±,Æ,Á□A
%»æ-ÊfTfCfY,É%»ž,¶,Ä□Ü,è•Ô,μCE...□”,²•ï%»»,μ,Ü,·□B
- * TAB fJf%»f€□”,đŽw'è,μ,Ü,·□B
0 ,ì□ê□#,í TAB ,đ“Á•Ê^μ,ç,μ,È,ç,ì,ÁŽáŠ±•\Ž!,²□,‘¬,É,È,è,Ü,·□B
comwin.ini [Console] ,²□X□V,³,é,Ü,·□B
- * fLfffvfvf#f“fo□[
fLfffvfvf#f“fo□[,ì•\Ž!□A”ñ•\Ž!,đŽw'è,μ,Ü,·□B
- * <N“ ® Žžf□Jf...□[fo□[
<N“ ® Žž,ìf□Jf...□[fo□[,ì•\Ž!□E”ñ•\Ž!,đŽw'è,μ,Ü,·□B
- * fc□[f<fo□[
fc□[f<fo□[,ì•\Ž!□A”ñ•\Ž!,đŽw'è,μ,Ü,·□B
- * □¶f}□[fWf“
□¶'α,Éf}□[fWf“,đŽæ,è,Ü,·□B
- * ftf@fCf%»□[fvf□f“fvfg
ftf@fCf<^è—,ìfvf□f“fvfg,đ•\Ž!,μ,Ü,·□B
- * ftf@f“fNfvf#f“fL□[
ftf@f“fNfvf#f“fL□[fo□[,ì•\Ž!□A”ñ•\Ž!,đŽw'è,μ,Ü,·□B
8CEÂ•\Ž!□A10CEÂ•\Ž!□A12CEÂ•\Ž!,đ'I,x,Ü,·□B
- * Šg'£fRf“f□[f<
Šg'£fRf“f□[f<(DOS),ì•\Ž!□A”ñ•\Ž!,đŽw'è,μ,Ü,·□B

(9) Environment (ŠeŽíŠÂ««□Ý'è)

- * Šg'£fRf“f□[f<,ì□Ý'è
DOS fRf}f“fh,ìŽÀ□s□ó'Ô,đ□§CEä,μ,Ü,·□B
- * •W□€PIF
ComWin ,² DOS fRf}f“fh,đŽÀ□s,·,é,½,β,ìf□□[f_—pPIF,đ□Ý'è,μ,Ü,·□B

- * fqfXfgfŠ[s]"
fRf}f"fh—š—đ,ì•Ù'¶[s]" ,đŸ'è,μ,Û,·B
- * Šg'£<N"®
ŽÀ[sftf@fCf<^ÈŠO,ìftf@fCf<,ì<N"®•û-@,đŽw'è,μ,Û,·B
- * ftf@fCf<-¼•âŠ®:'â•¶Žš,Â•Ž!
•âŠ®Žž,É'â•¶Žš,Â•âŠ®,³,è,Û,·B
'â•¶Žš,ÂfRf}f"fh,đ"ü—í,μ,Ä,ç,éêê¶•Ö—~ ,Â,·B
- * ftf@fCf<-¼•âŠ®:fffBfCfNfgfŠZfpfC[f^u/v
•âŠ®Žž,Éu/v,Â•âŠ®,³,è,Û,·B
- * ftf@fCf<-¼•âŠ®:fffBfCfNfgfŠZfpfC[f^t%Á
fffBfCfNfgfŠ-¼,đ•âŠ®,μ,½êê¶ÁCä,Éu\|v,|u|v,đ•t%Á,μ,Û,·B
- * ftf@fCf<-¼•âŠ®:fRf}f"fh-¼,à•âŠ®
•âŠ®Žž,ÉfRf}f"fh-¼,à•âŠ®,³,è,Û,·B
- * fqfXfgfŠ•âŠ®<@"\
C»Ÿ,ìfRf}f"fhf%ofCf" ,Æ^è'v,·,é•¶Žš—ñ,đ%ß<Ž,ì—š—đ,©,ç
Cÿđ,μ•âŠ®,μ,Û,·B
- * ftfBf<f^|<@"\
">", ">>", "<", "|" "™ ,ìftfBf<f^<@"\ŽÀC»,É•K—v,È"ÁŽê•¶Žš,đ
%đŽš,μAfšf_fCfCfNfgfAfpfCfv,đŽÀC»,μ,Û,·B
- * fGfXfP[fvfv[fPf"fx
fGfXfP[fvfv[fPf"fx,ì—LCøA-³Cø,đ,μ,Ä,μ,Û,·B
- * fofbf`ftf@fCf<Žg—pŽž,ÉfRf}f"fh,ìfGfR[—L-³,đŽw'è,μ,Û,·B
fofbf`ftf@fCf<ffofbfOŽž,ÉfRf}f"fh,đfGfR[,μ,½,çêê¶,É•Ö—~ ,Â,·B
comwin.ini [Console] ,âXV,³,è,Û,·B
- * fqfXfgfŠ[fRf}f"fh
UNIXf%ofCfN,ÈfqfXfgfŠ[<@"\,đ—LCø,É,μ,Û,·B
!! , !3 , !c "™ ,ìfRf}f"fhŽw'è,â%Â"\,É,È,è,Û,·B
- * Žqvf[fZfX,ÖŠÂ«Cp³
,±,ìf{fbfNfX,đf`fFfbfN,·,é,±,Æ,ÂA
C»Ÿ,ì ComWin ,ìŠÂ« ,đŽqvf[fZfX,ÉCp³,·,é,±,Æ,â,Â,« ,Û,·B
([^ÓBfvFf<,Æ,μ,ÄŽg—p,·,éêê¶,ìf`fFfbfN,μ,È,ç•û,â-],Û,μ,ç,Â,·B
|Ú,μ, ,ÍŠÂ«•ï"ft|[fo[<@"\,đŽQ(Æ)
- * fXfNf[f<,đ2[s-^,É," ,±,È,κ,©,Ç,κ,©Žw'è,μ,Û,·B
2[s-^,ÉŸ'è,·,é,±,Æ,ÂfXfNf[f<,â, '¬,É,È,è,Û,·B
,½,¾,μA"ííŽw'è,È,Ç" ÷'²® ,â•K—v,Èêê¶,íA2[s-^,ìŸ'è,đ
flft,É,μ,½,Û,κ,â•Ö—~ ,©,à,μ,è,Û,¹,ñB

* Š®‘S□Ä•`%œf,□[fh
 Š®‘S□Ä•`%œf,□[fh,Å,Í□AComWin ,ì%œ-Ê,^a¼,ìfEfBf“fhfE,ìEä,É
 , ,é□ó‘Ô,Å,à□A•\Ž!,ð—□,³, ,ÉfXfNf□□[f<,μ,Ü,·□B
 ,±,ì□ê□#□A□í,ÉfNfŠfbfv—ì^æ,ðf`fFfbfN,μ,Ä,ç,Ü,·,ì,Å□A
 fXfNf□□[f<,ìfXfs□[fh,íŽáŠ±‘x,,È,è,Ü,·□B

* fVfFf<,Æ,μ,ÄŽg—p
 ,±,ìf{fbfNfX,ðf`fFfbfN,·,é,±,Æ,ÅfVfFf<,Æ,μ,ÄŽg—p,Å,«,Ü,·□B
 f{fbfNfX,ìf`fFfbfN□ó‘Ô,^a•ï□X,³,é,é,Æ
 Windows ,^a□Ä<N“®,³,é,é,ì,Å‘□^Ó,μ,Ä,,³/₄,³,ç□B
 ,Ü,¹/₂□AfVfFf<,Æ,μ,ÄŽg—p,·,é□ê□#□AComWin ,ì•K—vftf@fCf<,í
 ŽŸ,ìfffBfÇfNfgfŠ,ì,ç,,é,©,É, ,é•K—v,^a, ,è,Ü,·□B
 Windows fffBfÇfNfgfŠ
 Windows fVfXfef€fffBfÇfNfgfŠ
 ŠÄ«•ï□” PATH ,ÅŽw’è,³,é,¹/₂fffBfÇfNfgfŠ
 (‘□^Ó)
 Windows 3.1 ^ÈŠO,ìŠÄ«•ï,Å ComWin(16bit),ðŽg—p,·,é□ê□#□A
 ,±,ìf□fj...□[,í‘ð,μ,È,ç,Å,,³/₄,³,ç□B

ŽQ□Æ DOSfRf}f“fh,ðComWin‘<,ÅŽÀ□s%œÄ”\□A
historyfRf}f“fh

(10) DOS Command (DOSfRf}f“fh,ì□Ý’è)

“Á’è,ì DOS fRf}f“fh,ì<N“®f,□[fh,ð□Ý’è,μ,Ü,·□B
 ‘Ê□í,ìfffTfHf<fg,ì<N“®f,□[fh,ðŽg—p,μ,Ü,·,^a□A
 “Á’è,ìfRf}f“fh,³/₄,·•Ê,ì<N“®f,□[fh,ðŽg—p,μ,¹/₂,ç,Æ,«,É□Ý’è,μ,Ü,·□B
 fRf}f“fh-¼,ìftf<fpfX-¼,ÅŽw’è,·,é,æ,æ,É,“Šè,ç,μ,Ü,·□B

(11) Launcher (ftf@f“fNfVf#f“fL□[f%of“f`ff□[,ì□Ý’è)

ftf@f“fNfVf#f“fL□[f%of“f`ff□[,ð□Ý’è,μ,Ü,·□B
 Fx, Shift+Fx, Ctrl+Fx, Shift+Ctrl+Fx (x = 1 □` 12)

,ì'g,Ý□†,í,¹,É,æ,è 48Ží—p,ìfRf}f“fh,ð“o~^,·,é,±,Æ,^a,Å,«,Ü,·□B

f^fCfjf<“ü—í—“ ... ftj@f“fNfVf†“fL□[fo□[,É•\Ž!,³,ê,éf^fCfjf<
fRf}f“fh“ü—í—“ ... ftj@f“fNfVf†“fL□[%oÿ%o°Žž,ìfRf}f“fh•¶Žš—ň
“~Šú•\Ž! ... Shift, Ctrl fL□[%oÿ%o°Žž,Éftj@f“fNfVf†“fL□[fo□[,ì
•\Ž!,ð“~Šú,μ,Ü,·□B

(12) Font (ftfHf“fg,ì□Ý'è)

ComWin ,É□o—í,³,ê,é•¶Žš,ìftfHf“fg'®□«,ð□Ý'è,μ,Ü,·□B
ÆÅ'èsfbf` ,ìftfHf“fg,ì,Ý—~—p,Å,«,Ü,·□B

(13) Color (□F,ì□Ý'è)

ComWin ,É□o—í,³,ê,é•¶Žš,ì“wCEi□F,ð□Ý'è,μ,Ü,·□B
Windows ,ìŽd—l,É,æ,è□A•¶Žš,ì“wCEi□F,í□f□F,μ,©Žw'è,Å,«,È,ç,ì,Å□A
ŽÀ□Ú,ÉŽw'è,μ,½,à,ì,Æ^Ù,È,Á,½□F,^a□o—í,³,ê,é,±,Æ,^a, ,è,Ü,·□B

(14) Key assign (fL□[Š,,,è“- ,Ä,ì□Ý'è)

ComWin ,ÉŠe'€ì,ÉŠ,,,è“- ,Ä,ç,é,éfL□[,ð□Ý'è•ï□X,μ,Ü,·□B
'uŠ•Æó•â,©,çÆó•â,ð'l,Ñ□A'uŠ·f{f^f“,ð%oÿ,·,Æ□A
fŠXfgf{fbfNfX,ÅfnfCf%ofCfj,³,ê,Ä,ç,é□€-Ú,ìfZfbfg,³,ê,Ü,·□B
—D□æfL□[□A•â□•fL□[,ì<æ•Ê,í%ofWfif{f^f“,Å□s,Á,Ä,,³/₄,³,ç□B
•Ú'¶f{f^f“,ð%oÿ,·,±,Æ,ÅŽÿ%oñ<N“®Žž,É“½%of,³,ê,Ü,·□B
□%oŠú'l,ÅffftfHf<fg,ì□ó'Ô,É-ß,μ,Ü,·□B

(15) Arguments (fVfFf<<N“®Žž^ø□”,ì□Ý'è)

```
comwinx.exe , í /c flfvfVfþf“^È~ ,ÉŽw’è,³,ê,½•¶Žš—ň,đ
fRf}f“fh,Æ,μ,Ä%ođŽž,μ<N“ ®Žž,ÉŽ©“ ®ŽÀ□s,μ,Ü,·□B
,μ,©,μ□AComWin ,đfvfFf<,Æ,μ,Ä—~—p,·,éêêþ□A
shell=comwinx.exe /c cwstart.bat ; <--- NG
shell=comwinx.exe <--- OK
,Æ,È,è□A<N“ ®Žž,ìflfvfVfþf“ ,áŽw’è,Å,«,Ü,¹,ň□B
```

```
,»,±,Å□AfvfFf<<N“ ®Žž,ìflfvfVfþf“ ,đ
Arguments f_fCfAf□fO,ÉŽw’è,μ,Ü,·□B
,±,ì<@“\,ífVfFf<,Æ,μ,Ä—~—p,·,é,Æ,«,ì,Ý—LÆø,Å,·□B
```

(16) Save Setting (ŠeŽí□Ý’è,ì•Ù‘¶)

```
ftfHf“fg,ì’®□«□A”wÆi□F□AfEfBf“fhfE,ìfTfCfY□A
fvf□f“fvfg•¶Žš—ň□AÆ¾Æêf,□[fh,đ•Ù‘¶,μ,Ü,·□B
ŽŸ%oň<N“ ®Žž,É,í,±,ì□Ý’è,áffftfHf<fg,É,È,è,Ü,·□B
```

```
fVfXfef€f□ffj...□[.ì□uEnglish□v,Å“ú-{Æê,Æ%opÆê,đ□ø,è’Ö,ì,é,±,Æ,Å
Æ¾Æêf,□[fh,ì•î□X,á%oÅ“\,Å,·□B
```

```
comwin.ini ,ì [Font], [Color], [Window], [Console], [Accessory] ,ì
ŠefZfNfvfþf“ ,á□X□V,³,ê,Ü,·□B
```

(17) Contents (flf“f%ofCf“fwf<fv)

```
ComWin ,ìflf“f%ofCf“fwf<fv,đ•Žì,μ,Ü,·□B
```

□@(18) About (ComWin,É,Â,ç,Ä)

```
ComWin ,É,Â,ç,Ä,ìî•ň,đ•Žì,μ,Ü,·□B
```

,Ü,½fVfXfef€ÉŠÖ,·,é□”□î•ñ,à“~Žž,É•\Ž!,μ,Ü,·□B



13. fXfNfŠfvgfŠftf@fĀf“fX

(1) fRf□f“fg

(2) —\-ñĀĒ

(3) 'è□”

(4) •ï□”

(5) —\-ñ•ï□”

(6) %o%oŽŽŽq

(7) ^ø—p•„

(8) fvf□fVfWff□[

(9) fRf}f“fh□s

(10) □šĀäfRf}f“fh^ê—

(1) fRf□f“fg

'#' ,Å,í,ŕ,Û,è□A%ü□s,Û,Å,ì•ŕŽš—ñ,ðfRf□f“fg,Æ,μ,Ä□^—□,μ,Û,·□B

—á

dir # fffBfĀfNfgfŠ“à,ìftf@fCf<^ê—,ð•Ž!,μ,Û,·□B

(2) —\-ñĀĒ

^È%o°,ì•ŕŽš—ñ,ìfXfNfŠfvg“à,Å—\-ñ,³,ê,Ä,ç,Û,·□B

break, breaksw, call, case, continue,
default, else, end, endif, endsw,
for, foreach, gosub, goto, if,
proc, return, shift, switch, then, until,
while

(3) 'è"

```
'è", ÍŠî-{"I,É•Źš—ñ,Æ,μ,Ä'è<` ,³,ê,Ü,·,ªA
•Źš—ñ,ì•À,Ñ,É,æ,èŽŸ,ìŽí—p,É•ª—p,³,ê,Ü,·B
  10i@"En( 0-9 ,ì•Źš,Å,Í,Ź,Ü,é,à,ì)A
  16i@"En( 0x ,ì2•Źš,Å,Í,Ź,Ü,é,à,ì)A
  •,"@-""_En( . •Źš,ªšÜ,Ü,ê,Ä,ç,é,à,ì)A
  fAfhfEfXEn(& •Źš,Å,Í,Ź,Ü,é,à,ì)A
  •Źš—ñEn(,»,ì¼)
```

—á

```
123456 (10i@"En)
0x123456 (16i@"En)
123.456 (•,"@-""_En)
&a123456 (fAfhfEfXEn)
"123456" (•Źš—ñEn)
```

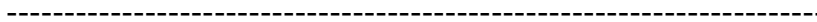
(4) •ï"

```
* Ž•ÊŽq
%opŽš,à,μ,,íu_v,Å,Í,Ź,Ü,é•Źš—ñ,Å,·B
"r't,É"ŽšA[u.v]u[u]v,đšÜ,β,é,±,Æ,ª%oÂ"\,Å,·B
2fofCgfgR[fh(Š;Žš™),àŽg—p%oÂ"\,Å,·B
•ï"-¼,đH•v,·,é,±,Æ,Å<[Ž—"z—ñ,âA<[Ž—\ç'ì,à'è<` ,Å,«,Ü,·B
array[0], array[1], array[100]
struct.member1, struct.member2,
struct.mem_ary[10], struct.mem_ary[25]
* é¾
set, let ,ì'ã"üŽ®,ÉŽw'è,·,é,©A
test, for (...;...;...), if (...), while (...), until (...),ì
EvŽŽ®,ÉŽw'è,·,é,±,Æ,ÅAŽ©"®"I,É—ì^æ,đšm•Û,μ,Ü,·B
Šî-{"I,É•Źš—ñE^,Æ,μ,Äé¾,³,ê,Ü,·B
* 'ã"ü
set foo=abc
```

```

set @ foo = 2 + 3
set @ foo += 3
“™, ì\•¶, Å’ã“ü%Å”\, Å, •□B□Ú, μ,, Í set , đŽQ□Æ, μ, Ä,, ¾, ³, ¢□B
* ŽQ□Æ
%foo% , ì, æ, x, ÉŠÂ«•ï□” , đ ‘%’ , ÅŠ‡, é, ±, Æ, ÅŽQ□Æ, Å, «, Ü, •□B
* <L%o~fNf%ofX
•ï□” , ì<L%o~fNf%ofX, ÍŽŸ, ì, Q, Å, É•Ê, ê, Ü, •□B
ŠO•”•ï□”(fVfXfef€ŠÂ«•ï□”)
, , x, Ä, ìfvf□fvfWff□[(ŠÖ□”)□Afvf□fZfX, ÅŽg—p%Å”\, È•ï□”, Å, •□B
set fRf}f“fh, Å□éƒ¼□A’ã“ü, μ, Ü, •□B
“à•”•ï□”(f□□[fjf<ŠÂ«•ï□”)
fjfƒf“fgfvf□fvfWff□[(ŠÖ□”), Å, ì, Ý—Lƒø, È•ï□”, Å, •□B
let fRf}f“fh, Å□éƒ¼□A’ã“ü, μ, Ü, •□B
•ï□”—ì^æ, í, » , ê, ¼, ê 4096 •¶Žš, Ü, Å—Lƒø, Å, •□B
* ĨŠ•K’Ÿ
Še•ï□”, É□ì—p, •, é%o%ŽŽžq, É, æ, è
•¶Žš—ñ□AfAfhfƒfX□A10□i□®□”□A16□i□®□”□A•, “®□¬□”“_□”, É
•ĨŠ•, ³, ê, Ü, •□B□Ú, μ,, Í%o%ŽŽžq, đŽQ□Æ, μ, Ä,, ¾, ³, ¢□B

```



(5) —\-ñ•ï□”

```

ŽŸ, ì•ï□”, Í, , ç, ©, ¶, ßfvfXfef€ , Å—\-ñ, ³, ê, Ä, ¢, Ü, •□B

```

status

```

'¼'O, ìfRf}f“fh, ì-ß, è'l, đŠi”[ , •, é□B

```

status_window

```

'¼'O, ìfRf}f“fh, ìfEfBf“fhfEfnf“fhf<, đŠi”[ , •, é□B

```

status_console

```

'¼'O, ĨŠg’£fRf“f□[f<(=DOS’<), ìfEfBf“fhfEfnf“fhf<, đŠi”[ , •, é□B

```



(6) %%%ŽŽŽq

(%%ŽŽŽq)(^Ó-;)(-Dæ#^ÊE•ûEü)(•İš•Æ`Ž®)
() 'l\z%%ŽŽŽq@@@ 1¶¶ •¶Žš—ň
++ Ćă'u'•â%%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
-- Ćă'uĆ,•â%%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
++ 'O'u'•â%%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
-- 'O'uĆ,•â%%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
~ •â"%%ŽŽŽq@@@ 2%%E 10¶i®"
! ~_—"Û'è%%ŽŽŽq@@@ 2%%E 10¶i®"
- 'P€- %%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
+ 'P€+ %%ŽŽŽq@@@ 2%%E 10¶i®"A•,"®-""_"
& fAfhfĆfX%%ŽŽŽq@@@ 2%%E fAfhfĆfX
* ŠŎÛ%%ŽŽŽq@@@ 2%%E •¶Žš—ň
\$ ŠŎÛ%%ŽŽŽq@@@ 2%%E •¶Žš—ň
: •¶Žš%%»%%ŽŽŽq@@@ 2%%E •¶Žš—ň
: "'l%%»%%ŽŽŽq@@@ 3¶¶ 10¶i®"
* 2€*%%ŽŽŽq@@@ 4¶¶ 10¶i®"A•,"®-""_"
/ 2€/%%ŽŽŽq@@@ 4¶¶ 10¶i®"A•,"®-""_"
% 2€%%%%ŽŽŽq@@@ 4¶¶ 10¶i®"
+ 2€+%%ŽŽŽq@@@ 5¶¶ 10¶i®"A•,"®-""_"
- 2€-%%ŽŽŽq@@@ 5¶¶ 10¶i®"A•,"®-""_"
<< ¶¶fVftfg%%ŽŽŽq@@@ 6¶¶ 16¶i®"
>> %%E¶fVftfg%%ŽŽŽq@@@ 6¶¶ 16¶i®"
< < %%ŽŽŽq@@@ 7¶¶ 10¶i®"
<= <=%%ŽŽŽq@@@ 7¶¶ 10¶i®"
> > %%ŽŽŽq@@@ 7¶¶ 10¶i®"
>= >=%%ŽŽŽq@@@ 7¶¶ 10¶i®"
== ==%%ŽŽŽq@@@ 8¶¶ 10¶i®"
!= !=%%ŽŽŽq@@@ 8¶¶ 10¶i®"
& frfbfgï%%ŽŽŽq@@@ 9¶¶ 16¶i®"
^ frfbfg·%%ŽŽŽq@@@ 10¶¶ 16¶i®"
| frfbfg~a%%ŽŽŽq@@@ 11¶¶ 16¶i®"
&& ~_—ï%%ŽŽŽq@@@ 12¶¶ 10¶i®"
|| ~_—~a%%ŽŽŽq@@@ 13¶¶ 10¶i®"
= 'P¶f'ă"ü%%ŽŽŽq@@@ 14%%E •¶Žš—ň

```

*= *=%%žžžq@#@#@#@#@14%E 10i@@"A•,"@-""_"
/= /=%%žžžq@#@#@#@#@14%E 10i@@"A•,"@-""_"
%= %=%%žžžq@#@#@#@#@14%E 10i@@"
+= +=%%žžžq@#@#@#@#@14%E 10i@@"A•,"@-""_"
-= -=%%žžžq@#@#@#@#@14%E 10i@@"A•,"@-""_"
<<= <<= %%žžžq@#@#@#@#@14%E 10i@@"
>>= >>= %%žžžq@#@#@#@#@14%E 10i@@"
&= &=%%žžžq@#@#@#@#@14%E 16i@@"
|= |=%%žžžq@#@#@#@#@14%E 16i@@"
^= ^=%%žžžq@#@#@#@#@14%E 16i@@"
, fff"f}%%žžžq@#@#@#@15¶ •¶žš—ň

```

```

'ä"ü%%žžžq,ì¶•Ó'l,É,í•ï"•¶žš—ň,đ,»,ì,Û,Ûžw'è,µ,Ä,,¾,¾,ç¶B
žQ¶Æ,·,é,½,ß,É,ÍŠÂ««•ï" ^ ø—p•,, %...% ,ª•K—v,Å,·¶B

```

```

set @ a = 1
set @ b = 2
set @ c = %a% + %b%
echo %a% + %b% = %c% # ---> 1 + 2 = 3

```

"ö|

```

*ŠÔú%%žžžq[u*¶v¶u$¶v,É,Â,ç,Ä
"C^Ó,ì•¶žš—ň,É¶u*¶v¶u$¶v,đ¶ì—p,¾,¾,é,±,Æ,Å¶A
•¶žš—ň,ìžw,·ŠÂ««•ï" ,ªžQ¶Æ,Å,«,Û,·¶B
ŠY"-,·,éŠÂ««•ï" ,ª¶¶Ý,µ,È,ç¶ê¶‡,Í<ó•¶žš,đ•Ô,µ,Û,·¶B
CÆ¾Æè,ìf¶Cf"f^ ,É'Š"-,·,é<@"\,Å,·¶B
    set @ a = 1
    set @ b = a
    set @ c = $(%b%)
    set @ d = $$b
    echo "%c%" "%d%" # ---> "1" "1"
¶u*¶v,Æ¶u$¶v,ì^á,ç
¶u$¶v,Íf¶¶[ffj<ŠÂ««•ï"(let ,Å¶éÆ¾,µ,½,à,ì),µ,©
žQ¶Æ,µ,Û,¾,ª,ª¶A¶u*¶v,ÍfvfXfef€ŠÂ««•ï"(set ,Å¶éÆ¾,µ,½,à,ì)
,àžQ¶Æ,µ,Û,·¶B

```



```

set path=c:\windows;c:\windows\system;c:\dos
let path1=%path%      # 'ã"ü
let @ path2 = *path  # 'ã"ü
let @ path3 = $path  # -ç'ã"ü
echo %path1% # ---> c:\windows;...
echo %path2% # ---> c:\windows;...
echo %path3% # ---> (,È,μ)

```

```
<t,lfP[fX,à, ,è,Ü,·B
```

```

let str=abc
set str1=%str%      # 'ã"ü
set @ str2 = *str   # 'ã"ü
set @ str3 = $str   # -ç'ã"ü
echo %str1% # ---> abc
echo %str2% # ---> abc
echo %str3% # ---> (,È,μ)

```

```
'Êí,Íf,Wf...[f<,ì"Æ—$«,ð•Û,Â,½,ß,Éu$V,ðŽg—p,·,×,«,Å,·B
```

```
*•¶Žš%»%»%»ŽŽŽq[u:V[A"'l%»%»%»ŽŽŽq[u:V,É,Â,ç,Ä
['P€%»%»ŽŽŽq,Æ,μ,ÄŽg—p]
```

```

let @ c = :0x41 # ASCII fR[fh,ð•¶Žš,É,·,éB
let @ w = :0x82A0
echo "%c%" "%w%" # ---> "A" " ", "

```

```
[,Q€%»%»ŽŽŽq,Æ,μ,ÄŽg—p]
```

```
let @ c = abc:0 # ¶¶€,ì•¶Žš—ñ,ì 0 "Ô-Ú,ð fR[fh
```

```
%»»,·,éB(0,©,çŠŽn)
```

```
let @ w1 = , ,ç,x:0 ;let @ w2 = , ,ç,x:1
```

```
let @ c ^|= 0, w = ($w1*0x100+$w2)^|0 # 10i•\Ž!,©,ç16i•\
```

```
Ž!,É•ïX
```

```
echo "%c%" "%w%" # ---> "0x00000041" "0x000082A0"
```

```
let s=123
```

```
let @ i = 0
```

```
let @ c[%i%] = :($s:$i), i++
```

```
let @ c[%i%] = :($s:$i), i++
```

```
let @ c[%i%] = :($s:$i), i++
```

```
echo %c[0]%%c[1]%%c[2] # ---> 123
```

```
*"C^Ó,ì•ŕŽš—ň,đ10□i□®□",ÉfLfffXfg,·,é—á  
set @ b = ~~a  
*"C^Ó,ì•ŕŽš—ň,đ16□i□®□",ÉfLfffXfg,·,é—á  
set @ b = a ^| 0  
*"C^Ó,ì•ŕŽš—ň,đ•,"®□¬□""_□",ÉfLfffXfg,·,é—á  
set @ b = a + 0.0
```

(7) ^ø—p•,,

```
ŽŸ,ì 3Ží—p,ì^ø—p•,,^è<` ,³,ê,Ä,ç,Ü,·□B
```

```
□u"□v(f_fuf<fNfH□[fg) 'É□í^ø—p•,,  
^ø—p•,,^í,Ü,ê,½•ŕŽš—ň,đ"ÁŽê•ŕŽš,àŠÜ,ß^ê,Ä,ì•ŕŽš—ň,É,μ,Ü,·□B  
%%ZZŽ®"à,Ä,ì,Ý—LCEø,Ä,·□B  
^ø—p•,, "à,ì"ÁŽê•ŕŽš,ì,» ,ê,đ—~—p,·,éRf}f"fh,É^È'ŕ,μ,Ü,·□B  
let @ str1 = "I am a boy."
```

```
□u`□v(fofbfNfNfH□[fh) fŠf_fCfCEfNfg^ø—p•,,  
^ø—p•,,^í,Ü,ê,½•ŕŽš—ň,đfRf}f"fh,Æ,Ý,È,μ□A  
,» ,ì□o—íCE<%%É,Æ'u,«Š·,!,Ü,·□B%%ZZŽ®"à,Ä,ì,Ý—LCEø,Ä,·□B  
^ø—p•,, "à,ì"ÁŽê•ŕŽš,ì,» ,ê,đ—~—p,·,éRf}f"fh,É^È'ŕ,μ,Ü,·□B  
let @ str1 = `echo I am a boy.`
```

```
□u%□v(fp□[fZf"fg) ŠÂ<«•ï□" ^ø—p•,,  
^ø—p•,,^í,Ü,ê,½•ŕŽš—ň,đŠÂ<«•ï□",Æ,Ý,È,μ□A  
,» ,ê,žw,μŽ!,·ŕŽš—ň,Æ'u,«Š·,!,Ü,·□B  
,·,x,Ä,lfRf}f"fhf%ofCf",Ä•]%%ž,³,ê,Ü,·□B  
^ø—p•,, "à,ì"ÁŽê•ŕŽš,ì,» ,ê,đ—~—p,·,éRf}f"fh,É^È'ŕ,μ,Ü,·□B  
let @ str1 = %str0%
```

```
"ð□l  
* %%ZZŽ®
```

```

test expr, set @ expr, let @ expr,
for (expr;expr;expr), if (expr) then, until (expr), while (expr)
, ì expr ,ÉŠY“- , ,é•”•ª,Å,·□B
* □u%□v,Æ□u*□v,□u$□v,ì^á,ç,É,Â,ç,Ä
^È%ooº,ìŽ® ,í,·,×,Ä“™ %oo¿,Å,·,ª□A
Žg—p—@,É,æ,è'â,«,^Ù,È,é□ê□‡,à, ,è,Ü,·□B
let @ a = %b% + %c%
let @ a = $b + $c
let @ a = *b + *c
%...% ,í,·,×,Ä,ìfRf}f“fhf%oofCf“ ,Å•¶Žš—ñ,Æ,µ,Ä“WŠJ,³,ê,é,ì,É'Î,µ□A
□u*□v,□u$□v,í %oo%ŽŽŽ® “à,ì%oo%ŽŽŽq,Å,·□B,µ,½,ª,Á,Ä•>□ì—
p,í, ,è,Ü,¹,ñ□B
%...% ,í%oo%ŽŽŽq,ì•] %oo¿'O,É“WŠJ,³,ê,é,ì,Å□A•>□ì—p,à, ,è,Ü,·,ª□A
□đĀ□Ž®,đ,»,ì,Ü,ÜŽw'è,·,é,±,Æ,à,Å,«,Ü,·□B
let a = ^" # •>□ì—p,ì—á
if ("%a%" == "") then # fGf%oo□[ "" ,Æ,È,è^ø—p•,,ìfXfg,ª•ö,ê,é□B
let condition=$a+$b
if (%condition%) then # □đĀ□Ž®,»,ì,à,ì,àŽw'è,Å,«,é□B

```

(8) fvf□fvfWff□[

```

fvf□fvfWff□[,Æ,ç,α'É-ó'P^Ê,ÅfXfNfŠfvfg,ÍŠÇ—□,³,ê,Ä,ç,Ü,·□B
Šefvf□fvfWff□[,í proc func (-¼'O) ,Å<æ□ø,ç,ê,Ä,ç,Ü,·□B

```

BOF(Begin Of File)

```

...          f□fCf“fvf□fvfWff□[
proc abc
...          abc fvf□fvfWff□[
proc def
...          def fvf□fvfWff□[
proc ghi
...          ghi fvf□fvfWff□[

```

EOF(End Of File)

```

Šefvf[]fVfWff[][,í“Æ—§,μ,½[]A“à•”•ï[]“[]Af%ofxf<,đŽ[],ž,Ü,·[]B
fXfNfŠfvg,đŽÀ[]s,μ,½[]ê[]#[]A[]Å[]%o,Éf[]fCf“fvf[]fVfWff[][,ªŽÀ[]s,ª,ê,Ü,·[]B
,»[,ì‘¼,ìfvf[]fVfWff[][,í call fRf}f“fh,ÅÆÄ,Ñ[]o,μ,Ü,·[]B
  call @ abc 1 2 3
Šefvf[]fVfWff[][,ì^ø,«[]“,í %1 %2 %3 ... %9 ,ÅŽQ[]Æ,·,é,±,Æ,ª,Å,«,Ü,·[]B
%0 ,ìfXfNfŠfvgftf@fCf<-¼,Å,·[]B

```

```

[fvf[]fVfWff[][ŠÔ,ìff[]f^[][,ì^ø,«“n,μ]
Šefvf[]fVfWff[][,í,»,ê,¼,ê“Æ—§,μ,½[]A“à•”•ï[]“[]Af%ofxf<,đŠ—L,μ,Ü,·,ª[]A
,±,ê,ìŠefvf[]fVfWff[][,ìf,fWf...[]f<%o»,É,í—LÆø,Å,·,ª[]Aff[]f^[][‘€[]ì,đ
[]s,æ,É,í•s•Ö,Å,·[]B,»,±,ÅŽŸ,ì•û-@,ª—p^Ó,ª,ê,Ä,ç,Ü,·[]B

```

1. gosub ,đŽg—p,·,é[]Bgosub ,É,æ,Å,ÄÆÄ,î,ê,é^—[],í[]A
 “à•”•ï[]“,đ<α—L,Å,«,Ü,·[]B,½,¾,μ[]Af,fWf...[]f<%o»,É,í•s“K”—,Å,·[]B
2. set ,đ—~—p,·,é[]Bset ,É,æ,éŠO•”•ï[]“,Åff[]f^[][,đ<α—L,μ,Ü,·[]B
 ,½,¾,μ[]A‘â—Ê,ìff[]f^[][,đŽó,~“n,·,É,í•s“K”—,Å,·[]B
3. & ,đ—~—p,·,é[]B[]u&[]v%o%oŽŽŽq,Åff[]f^[][,ì•ï[]X,đ<-%oÅ,·,é,±
 ,Æ,ª,Å,«,Ü,·[]B
 Šefvf[]fV[]fWff,đf,fWf...[]f<%o»,·,é,É,í[]Å,à—LÆø,È•û-@,Å,·[]B

```

—á
let @ a = 1
let @ b = 2
call @ swap &a &b
return

```

```

proc swap
let pa=%1
let pb=%2
let @ tmp = $%pa%
let @ %pa% = $%pb%
let @ %pb% = $tmp
return

```

```

[]u&[]v•¶Žš,đ•ï[]“-¼,ì[]æ“ª,É,Å,~,é,±,Æ,ÅÆÄ,Ñ[]o,ª,ê,½Žqfvf[]fVfWff[][,í
[]u&[]v•¶Žš^È%o°,ì•¶Žš—ñ,Æ^ê‘v,·,éfwbfbf_[][,đ,à,Á,½[]efvf[]fVfWff[][,ì•ï[]“,đ

```

• ĩX, ,é, ±, Æ, ð, Å, «, Ü, ·B<[Ž—”z—ñ, ð^μ, π, ±, Æ, à, Å, «, Ü, ·B

—á)

let @ a[0] = 1

let @ a[1] = 2

call @ swap &a

return

proc swap

let pa=%1

let @ tmp = \$%pa%[0]

let @ %pa%[0] = \$%pa%[1]

let @ %pa%[1] = \$tmp

return

(9) fRf}f“fh□s

□\$CEäfRf}f“fh□s

ŽŸ, ì•ŸŽš—ñ, ÅŽn, Ü, é□s, í□\$CEäfRf}f“fh□s, Æ, μ, Ä□^—□, ð, é, Ü, ·B

break, breaksw, call, continue, else,

end, endif, for, foreach, goto,

if, return, shift, switch, until, while

f%oofxf<□s

ŽŸ, ì•ŸŽš—ñ, à, μ, , í□u:□v, ÅŽn, Ü, é□s, íf%oofxf<□s, Æ, μ, Ä□^—□, ð, é, Ü, ·B

case, default, endsw

'Ê□íRf}f“fh□s

□\$CEäfRf}f“fh□s, Å, àf%oofxf<□s, Å, à, È, ç□s, í'Ê□íRf}f“fh□s, Æ, μ, Ä

%oðŽš, ð, é, Ü, ·BComWin , ìRf}f“fhf%ofCf“%oðŽš, É□€, Ÿ, Ü, ·B

”õ□

@ , ÅŽn, Ü, é□s, ífGfR□[fíf“□ó'Ô, Å, à•\Ž, ð, é, Ü, ð, ñ□B

DOS , Æ, ìCEÝŠ•□«, ì, ½, ß, É, , è, Ü, ·B

□u@echo off□v□A□u@REM BAT FOR COMWIN□v^ÈŠO, Å, í

□í<É“ì, ÉŽg—p, , é•K—v, í, , è, Ü, ð, ñ□B

(10) `break`

(1) break

(2) breaksw

(3) call

(4) continue

(5) else

(6) end

(7) endif

(8) for

(9) foreach

(10) gosub

(11) goto

(12) if

(13) return

(14) shift

(15) switch

(16) then

(17) until

(18) while

(1) break

for `f<[fv]A` while `f<[fv]A` until `f<[fv]A`

foreach `f<[fv, ©, ç'E□o, μ, Ü, ·]B`

“`^êf|Xfg, ì end fRf}f“fh, ìŽŸ, ì□s, ÉŽÀ□s^Ê'u, ð^Ú, è, Ü, ·□B`

—á

let @ i = 1

while (1)

if (`$i >= 10`) break

let @ i += 1

end

```
(') DOS ĀŸŠ, ì break fRf}f“fh, í mode fRf}f“fh, É<zŽŮ, ³, ê, Ü, μ, ½B
```

(2) breaksw

```
switch fuf fbfN, ©, ç'E o, μ, Ü, ·B  
“-^êflXfg, ì endsw f%ofxf<, ìŽŸ, ìs, ÉŽÀs^Ê'u, a^Ú, è, Ü, ·B
```

—á

```
let @ i = 1  
switch (%i%)  
  case 0 :  
    breaksw  
  case 1 :  
    breaksw  
  default :  
    breaksw  
endsw
```

(3) call

```
fRf}f“fh Afvf fVfWff[, ðŽÀs, μ, Ü, ·B  
call command [args]  
fRf}f“fhŽÀs^—, í DOS ,Æ, ìĀŸŠ·«, ì, ½, ß, É, , è, Ü, ·B  
'Êí, ífofbf`ftf@fCf<, àŠÜ, ßfRf}f“fh-¼, ìŽw'è, ¾, -, ÅŽÀs%oÅ"\, Å, ·B  
call @ proc [args]  
fofbf`ftf@fCf<“à, Å'è<`, ³, ê, ½fvf fVfWff[, ðĀÄ, Ño, μ, Ü, ·B  
^ø, «”, ìŽw'è, à%oÅ"\, Å, ·B  
call fRf}f“fh, ìÅ'âflXfg, í 5 , Å, ·B  
("à•", Å System() API , ðĀÄ, ÔfRf}f“fh, ð—~—p, ·, éêê#A  
, », ê^È%o, Å, àflXfgfGf%o[, a"¶, ·, éêê#ª, , è, Ü, ·B)  
  
call @ proc , ìŽŸ, ì, æ, x, É“WŠJ, ³, ê, Ü, ·B
```

```

call @ proc ---> %0 -@:proc
,±,ì<K'¥,ð%ž—p,·,é,±,Æ,Å'¼,ìftf@fCf<,ì
fvf[]fvfWff[],ðÆÄ,Ñ[]o,·,±,Æ,à%oÅ"\,Å,·[]B
,Ü,½[]AComWinfxfnfšfvfg,Å,í -@ flfvfVf#f" ,í—\—ñ,3,ê,Ä,ç,Ü,·[]B

```

```

—á
#-----#
# main.cws #
#-----#
let str1=abc
let str2=def
string.cws -@:strcat &str1 &str2
return

#-----#
# string.cws #
#-----#
proc strcat
let pdst=%1
let psrc=%2
let @ tmp1 = $%pdst%
let @ tmp2 = $%psrc%
let @ %pdst% = %tmp1%%tmp2%
return

```

(4) continue

```

for f<[]fv[]Awhile f<[]fv[]Auntil f<[]fv[]A
foreach f<[]fv,Åf<[]fv[]ðÆ[]•¶,Ü,ÅÆp'±,µ,Ü,·[]B
""^êflfxfg,ì end fRf}}f"fh,ì[]s,ÉŽÀ[]s^Ê'u,â^Ú,è,Ü,·[]B

```

```

—á
let @ i = 1
while ($i <= 100)
  let @ i += 1

```



```
( 7) endif
if (...) then ... else ... endif
```

```
—á
if not exist \autoexec.bat then
    # \autoexec.bat ,@,È,©,Á,½,ç
endif
```

```
( 8) for
for (expr1 ; expr2 ; expr3)
    expr1 ,Å□%oŠú%o»»,đ□s,ç□Aexpr2 ,@□^,ìŠÔ expr3 ,đĈJ,è•Ô,μ,Û,·□B
    expr2 ,@<U,ì□ê□#□A“^-êfIfXfg,ì end ,ìŽŸ,ì□s,ÉŽÀ□s^Ê'u,đ^Ú,μ,Û,·□B
```

```
—á

# SJIS 2fofCfgfR□[fh,đ—ñ<“,μ,Û,·□B
for (i = 0x81; $i <= 0x9F; i++)
    for (j = 0x40; $j <= 0xFC; j++)
        if ($j == 0x7F) continue
        let @ c = :($i * 0x100 + $j)
        echo %c%^c
    end
end
for (i = 0xE0; $i <= 0xFC; i++)
    for (j = 0x40; $j <= 0xFC; j++)
        if ($j == 0x7F) continue
        let @ c = :($i * 0x100 + $j)
        echo %c%^c
    end
end
echo
return
```



```

# let @ ,ÆŽg—p,·,é,Æ':""™ ,ª%‰‰ŽŽŽq,Æ‰‰đŽß,³,ê,é,ì,Å•s“K“-
let argv[%argc%]=%0
let @ argc += 1
shift
end
return

```

(11) goto

```

goto label
:label ,ÅŽw'è,³,ê,½f‰‰xf<□s,ÉŽÀ□s^Ê'u,đ^Ú,μ,Û,·□B
f‰‰xf<□s,ìftfH□[f}fbfg,í ':' + •¶Žš—ñ,Å,·□B

```

(12) if

```

if condition command
□đĈ□•¶,ª□^,È,ç,ìfRf}f“fh,đŽÀ□s,μ,Û,·□B
□đĈ□•¶,ÉŽŸ,ì□'Ž®,ªŽg—p□o—^,Û,·□B
if [not] errorlevel [==] <0-255> command
fGf‰‰□[fĈfxf<,ì”»'è
if [not] exist <file> command
ftf@fCf<<file>,ì'¶□Ý,ìf`fFbfN
if [not] string1 == string2 command
•¶Žš—ñ<string1><string2>,ì”äŠr
if (expression) command
ĈvŽŽŽ® <expression>,ì”»'è
,Û,½□đĈ□Ž®,ª<U,Å, ,Á,Ä,à if □s,ìfRf}f“fh•”•ª,ª then ,È,ç,î
then fRf}f“fh,đŽÀ□s,μ if (...) then ... else ... endiffuf□fbfN,É
“ü,è,Û,·□B

```

```

('□) fGf‰‰□[fĈfxf<,í %status% ,Æ“” ,¶'l,đ,à,¿,Û,·□B
status ,í'¼'O,ìfRf}f“fh,ì-ß,è'l,Å,·□B

```

```

let @ a = 1
let @ b = 2
test $a == $b
if errorlevel 1 echo fGf%o[ ,@ ,è,Û,·B

let file=\config.sys
if not exist %file% echo %file% ,@'¶ÛÝ,μ,Û,¹,ñB

let str1=ABC
let str2=DEF
if "%str1%" == "%str2%" then
    echo %str1% ,Æ %str2% ,Í^ê'v,μ,Û,·B
else
    echo %str1% ,Æ %str2% ,Í^ê'v,μ,Û,¹,ñB
endif

let @ i = 1
if ($i == 1) echo %i% ,Í 1 ,Å,·B

```

(13) return
return number
number ,ÅŽw'è,³,ê,½Û''l,ð-β,è'l,Æ,μ,ÄfVfXfef€É•Ô,μ,Û,·B

(14) shift
shift
^øÛ",ð¶¶,Éfvftfg,μ,Û,·B
shift ,ðŽÀÛs,·,é,Æ %1 ,@ %0, %2 ,@ %1 ,Æ,È,è,Û,·B

(15) switch
switch (string)

```

string ,Æ^ê'v,·,é•ŕŽš—ñ,ð,à,Á,½ case f%ofxf<,Ü,ÅfWfff“fv,μ,Ü,·□B
,Ç,ì case f%ofxf<,É,àŠY“- ,μ,È,ç□ê□‡,í□Adefault f%ofxf<,ª, ,ê,î
,» ,±,ÉfWfff“fv,μ□A,È,ç□ê□‡,í endsw ,Ü,ÅfWfff“fv,μ,Ü,·□B

```

```

let string=str0
switch (%string%)
  case str0 :
    breaksw
  case str1 :
    breaksw
  case str2 :
    breaksw
  default :
    breaksw
endsw

```

```

□ucase x :□v□udefault :□v,ì□u:□v,ì'O,É,íXfy□[fX,ª•K—v,Å,·□B
fXfy□[fX,ð“ü,ê,È,ç□ê□‡,í'¼'O,ì•ŕŽš—ñ,ÆCE<□‡,μ,Ü,·□B
case a : <--- □³
case a: <--- CEë □ua:□v,Æ”»'è,μ,Ü,·□B

```

```

(16) then
  if □ðCE□•ŕ,ª□^,ì□ê□‡□AZÿ,ì□s,ðŽÀ□s,μ,Ü,·□B
  <U,ì□ê□‡□A“^êfXfg,ì else fRf}f“fh,Ü,ÅfWfff“fv,μ,Ü,·□B
  then 'P“Æ,ìŽw'è,í,Å,« ,Ü,¹,ñ□B

```

```

—á
let @ i = 10
if ($i == 10) then
  echo %i% ,í 10 ,Å,·□B
else
  echo %i% ,í 10 ,Å,í, ,è,Ü,¹,ñ□B
endif

```

(17) until

until (expression)

expression ,^a^,îŠÔf<[fv,đŽÀ[s,μ,Û,·B

Å%o,ì1%oñ-Ú,¾,¯,Í expression ,đŽÀ[s,¹,„f<[fv,É“ü,è,Û,·B

—á

let @ i = 10

until (\$i <=10)

 echo %i%

 let @ i += 1

end

(18) while

while (expression)

expression ,^a^,îŠÔf<[fv,đŽÀ[s,μ,Û,·B

—á

let @ i = 1

while (\$i <= 10)

 echo %i%

 let @ i += 1

end

14. EXPORTŠÖ" ,)à-¾

- (1) Puts, cwPuts (o—ÍŠÖ")
- (2) Gets, cwGets ("ü—ÍŠÖ")
- (3) Fputs, cwFputs (ftf@fCf<o—ÍŠÖ")
- (4) Fgets, cwFgets (ftf@fCf<"ü—ÍŠÖ")
- (5) System, cwSystem (ŽÀsŠÖ")
- (6) Getch, cwGetch ('¼Ú"ü—ÍŠÖ")
- (7) Inkey, cwInkey ('¼Ú"ü—ÍŠÖ")
- (8) Fwrite, cwFwrite (fofCfifŠo—ÍŠÖ")
- (9) Fread, cwFread (fofCfifŠ"ü—ÍŠÖ")
- (10) GetComWinLong (î•ňŠÖ")
- (11) MakeArgument (^ø,«"i—ŠÖ")
- (12) cwPutenv (ŠÂ«•ĭ"Ÿ'èŠÖ")
- (13) cwGetenv (ŠÂ«•ĭ"Žæ"¾ŠÖ")
- (14) cwFprintf (Ž®•to—ÍŠÖ")
- (15) cwFputsW (Unicodeo—ÍŠÖ")
- (16) cwFgetsW (Unicode"ü—ÍŠÖ")
- (17) CallCommand(%o¼l) ("à•"fRf}f"fh'ň<ŸŠÖ")
- (18) CallInterpreter(%o¼l) (fRf}f"fh%øŽB'ň<ŸŠÖ")
- (19) CallScript(%o¼l) (fXfNfŠfvfg'ň<ŸŠÖ")
- (20) CallCommand ('[---pfRf}f"fh^—ŠÖ")

(1) Puts, cwPuts (o—ÍŠÖ")

ŠÖ"-¼ Puts, cwPuts

```
LONG FAR PASCAL Puts(LPSTR lpStr); // fvf[]fgf^fCfv  
LONG FAR PASCAL cwPuts(LPSTR lpStr); // fvf[]fgf^fCfv
```

<@"\ ASCIIZ•Ÿš—ň lpStr ,ðComWin,lfNf%fCfAf"fg—l^æ,Éo—í,μ,Ü,·B

^ø" lpStr o—í,·,é•Ÿš—ň

-β,è'l □³□í□A□o—í,μ,½•¶Žš□"
fGf%oo□□A-1

□Ú□x,í hello.c sample1.c ,đŽQ□Æ,μ,Ä,,¾,³,ϕ□B

(2) Gets, cwGets (“ü—íŠÖ□”)

ŠÖ□”-¼ Gets, cwGets

```
LPSTR FAR PASCAL Gets(LPSTR lpStr); // fvf□fgf^fCfv  
LPSTR FAR PASCAL cwGet(LPSTR lpStr); // fvf□fgf^fCfv
```

<@”\ ComWin ,lfNf%ofCfAf“fg—ìæ,É“ü—í,³,ê,½•¶Žš—ñ,đŽæ“¾,μ,Ü,·□B

^ø□” lpStr “ü—í,·,é•¶Žš—ñ,ì,½,β,lfofbftf@

-β,è'l □³□í□AlpStr
fGf%oo□□ANULL

'□^Ó

```
Gets ,í ANSI C ,ì□³Ž® ,ÈŠÖ□” gets ,É□€<' ,μ,Ä,ϕ,é,ì,Å,·,ª□A  
ÆÄ,î,ê,½'x,ªfofbftf@□□[·,đŠÇ—□,Å,« ,È,ϕ,Æ,ϕ,x'v-½“l,È  
Žd—lf~fX,ª ,è,Ü,·,ì,Å□A•s“Á'è'½□” ,ÉfŠfŠ□□fX,·,éf\ftfg,É,í  
Žg,í,È,ϕ,Ü,x,ª-³“i,¾,ÆŽv,í,ê,Ü,·□BFgets ,Å'ã—p,μ,Ä,,¾,³,ϕ□B
```

□Ú□x,í sample1.c ,đŽQ□Æ,μ,Ä,,¾,³,ϕ□B

(3) Fputs, cwFputs (ftf@fCf<□o—íŠÖ□”)

ŠÖ□”-¼ Fputs, cwFputs

LONG FAR PASCAL Fputs(LPSTR lpStr, LPVOID lpInfo);
LONG FAR PASCAL cwFputs(LPSTR lpStr, LPVOID lpInfo);

<@"\ ftf@fCf<,É•¶Žš—ň,đ□o—Í,μ,Ü,·□B

^ø□" lpStr □o—Í,·,é•¶Žš—ň
lpInfo ftf@fCf<□î•ň

-ß,è'l □³□í□A□o—Í,μ,½•¶Žš□"
fGf%□□[□A-1

lpInfo = NULL ,ìŽž□A•W□€□o—Í
lpInfo = (LPVOID)-1 ,ìŽž□A•W□€fGf%□□[□o—Í

cwFputsW ,í Unicode —p,ìAPI,Å,·□B

□Ú□×,í sample1.c ,đŽQ□Æ,μ,Ä,,¾,³,†□B

(4) Fgets, cwFgets (ftf@fCf<"ü—ÍŠÖ□")

ŠÖ□"—¼ Fgets, cwFgets

LPSTR FAR PASCAL Fgets(LPSTR lpStr, LONG ISize, LPVOID lsInfo);
LPSTR FAR PASCAL cwFgets(LPSTR lpStr, LONG ISize, LPVOID lpInfo);

<@"\ ftf@fCf<,©,ç•¶Žš—ň,đ"ü—Í,μ,Ü,·□B

^ø□" lpStr "ü—Í,·,é•¶Žš—ň,ì,½,ß,ìfofbftf@
ISize fofbftf@fTfCfY
lpInfo ftf@fCf<□î•ň

-ß,è'l □³□í□AlpszS
fGf%□□[□ANULL

```
lpInfo = NULL ,ìžž□A•W□€“ü—í
lpInfo = (LPVOID)-1 ,ìžž□A•W□€fGf%□[“ü—í
```

(5) System, cwSystem (ŽÀ□sŠÖ□)

ŠÖ□”-¼ System, cwSystem

```
LONG FAR PASCAL System(LPSTR lpszCommand);
LONG FAR PASCAL cwSystem(LPSTR lpszCommand);
```

```
<@”\ ComWin ,ìfT□[frfX,đ—p,č,ÄfRf}f“fh,đŽÀ□s,μ,Ü,·□B
```

```
^ø□” lpszCommand fRf}f“fh•¶Žš—ñ
-ß,è’l ŠefRf}f“fh,ì-ß,è’l,É^È’¶□B
```

(6) Getch, cwGetch (¼□Ú“ü—íŠÖ□)

ŠÖ□”-¼ Getch, cwGetch

```
LONG FAR PASCAL Getch(void);
LONG FAR PASCAL cwGetch(void);
```

```
<@”\ ‘[--,©,ç’¼□Ú“ü—í,đ’Ò,ž,Ü,·□B(fGfR□[fofbfN,È,μ)
```

```
^ø□” ,È,μ
```

```
-ß,è’l □³□í□A%¼’zfL□[fR□[fh
fGf%□[□A0
```

```
%¼’zfL□[fR□[fh,íŽŸ,ì,æ,α,È□\‘č,É,È,Á,Ä,č,Ü,·□B
□ã^Ê16frfbfg□A0x0100(=WM_KEYDOWN) ,Ü,½,í 0x0102(=WM_CHAR)
%º^Ê16frfbfg□A□ã^Ê16frfbfg,ì□fbfZ□[fW,É’î%ž,μ,½fL□[fR□[fh
```

□Ú,μ,,Í SDK windows.h ,đŽQ□Æ,μ,Ä,,¾,¾,¢□B

Getch fRf}f“fh,ìfofo,đftfBfbfNfX,μ,½CE<%oÊ□A
fL□[fR□[fh,ì'l,ª Version 2.80 ,æ,è•İ,í,è,Ü,μ,½□B
^È'O,ì Version ,É^È'¶,μ,½fvf□fOf%of€ ,đ—~—p,·,é□ê□‡,Í
comwin.ini [etc] ,É Getch=230 ,Æ<L□q,μ,Ä,,¾,¾,¢□B
 cwmore fRf}f“fh“™ ,ªŠY“- ,μ,Ü,·□B
fo□[fWf‡f“ ,É,æ,è□AGetch=230,Getch=271,Getch=280(ffftfHf<fg)
,ª'l,×,Ü,·□B
 ,Ü,½□A,±,ìfìfvfVf‡f“ ,Í 96/04/01 ^È□~ ,Í-³CEø,É,È,é%oÂ“\□« ,à , ,è,Ü,·□B

(7) Inkey, cwInkey ('¼□Ú“ü—ÍŠÖ□”)

ŠÖ□”-¼ Inkey, cwInkey

LONG FAR PASCAL Inkey(void);
LONG FAR PASCAL cwInkey(void);

<@”\ '[-,©,ç'¼□Ú“ü—Í,đf`fFfbfN,μ, ,é,Í
 %o¼'zfL□[fR□[fh,đ•Ô,μ,Ü,·□B(fGfR□[fofbfN,È,μ)

^ø□” ,È,μ

-ß,è'l %o¼'zfL□[fR□[fh,Ü,½,Í 0

%o¼'zfL□[fR□[fh,ÍŽŸ,ì,æ,α,È□\¢,É,È,Á,Ä,¢,Ü,·□B
□ã^Ê16frfbfg□A0x0100(=WM_KEYDOWN) ,Ü,½,Í 0x0102(=WM_CHAR)
%oª^Ê16frfbfg□A□ã^Ê16frfbfg,ìf□fbfZ□[fW,É'Í%ož,μ,½fL□[fR□[fh
□Ú,μ,,Í SDK windows.h ,đŽQ□Æ,μ,Ä,,¾,¾,¢□B

(8) Fwrite, cwFwrite (fofCfifŠ□o—ÍŠÖ□”)

ŠÖ"–¼ Fwrite, cwFwrite

```
LONG FAR PASCAL Fwrite(LPVOID lpObject, LONG ISize,
                          LONG ICount, LPVOID lpInfo);
LONG FAR PASCAL cwFwrite(LPVOID lpObject, LONG ISize,
                          LONG ICount, LPVOID lpInfo);
```

<@"\ fofCjifŠff[f^,đ'[--,É'—,éB

```
^ø" lpObject '—o,·,éff[f^,Ö,lfjCf"f^
  ISize   flfufWfFfNfg,lfTfCfY
  ICount  flfufWfFfNfg,ì"
  lpInfo  ftf@fCf<[\ç'ì,Ö,lfjCf"f^
          NULL      ,ìžžA•W€o—í
          (LPVOID)-1 ,ìžžA•W€fGf%o[[]o—í
```

-ß,è'l []o—í,μ,½flfufWfFfNfg,ì"

'[^Ó comwinx.exe ,lfofCjifŠ"ü[]o—í,đ³Ž®,ÉfTf|[]fg,μ,Ä,ç,È,ç,ì,Å
[]³í,É"®[]i,μ,Ü,¹,ñB

(9) Fread, cwFread (fofCjifŠ"ü—ÍŠÖ")

ŠÖ"–¼ Fread, cwFread

```
LONG FAR PASCAL Fread(LPVOID lpObject, LONG ISize,
                       LONG ICount, LPVOID lpInfo);
LONG FAR PASCAL cwFread(LPVOID lpObject, LONG ISize,
                        LONG ICount, LPVOID lpInfo);
```

<@"\ fofCjifŠff[f^,đ'[--,©,çŽæ"¾,·,éB

```
^ø" lpObject Žæ"¾,·,éff[f^,Ö,lfjCf"f^
  ISize   flfufWfFfNfg,lfTfCfY
```

```

lCount   flfufWfFfNfg,ì"
lpInfo   ftf@fCf<'\ç'ì,Ö,lfjfCf"f^
          NULL      ,ìžžA•W€"ü—í
          (LPVOID)-1 ,ìžžA•W€fGf%o["ü—í

```

-ß,è'l Žæ^{3/4},μ,½flfufWfFfNfg,ì"

'^Ó comwinx.exe ,ífofCfifŠ"üo—í,đŽ® ,Éftf|[fg,μ,Ä,ç,È,ç,ì,Å
 ³í,É"®ì,μ,Ü,¹,ñB

(10) GetComWinLong (î•ñŠÖ")

ŠÖ" -¼ GetComWinLong

DWORD FAR PASCAL GetComWinLong(DWORD dwID, DWORD
 dwData);

<@\ ComWin fVfXfef€ ,É,Â,ç,Ä,ì"î•ñ,đŽæ^{3/4},μ,Ü,·B

^ø" dwID î•ñ"Ô†
 dwData î•ñ"Ô†,É'î%ž,·,é32bit'l
 -ß,è'l î•ñ

î•ñ"Ô† 0 ... comwin.dll ,fo[fWf#f""Ô†,đŽæ^{3/4},·,éB
 —á

```

IVer = GetComWinLong(0, 0);
HIWORD(IVer) : fo[fWf#f""Ô†

```

î•ñ"Ô† 1 ... '[--,ìŠÂ<<•ï"ff[f^ ,đŽæ^{3/4},·,éB
 —á

```

lpEnv = (LPSTR)GetComWinLong(1, 0);
ŠÂ<<•ï"—ì^æ,É,í "env1=value1\0env2=value2\0...envz=valuez\0\0"
,ì€`Ž®,ÅŠÂ<<•ï",Ši"[,3,ê,Ä,ç,Ü,·B
'[--,ìŠÂ<<•ï"—ì^æ,3,"j%ó,3,ê,é,ÆfVfXfef€,Éd'â,ÈáŠQ,đ<y,Ú,μ,Ü,·,ì,ÅA

```

ŠŤ««•i” ,đ’ ,«ž ,pêž ,É,Í cwPutenv ,đŽg—p,μ,Ä,,¾,³,çB

ŕ•ň”Ô† 2 ... '[-- ,lfEjBf“fhfEfnf“fhf< ,đŽæ“¾,·,éB
—á

```
hwnd = (HWND)GetComWinLong(2, 0);
```

ŕ•ň”Ô† 3 ... ffbfZ[fWfpfPfbfg,ì“üo—Í,đs,æB
—á

```
CW_S_CONSOLE_INFO ci;  
memset(&ci, 0, sizeof(ci));  
ci.lMessage = CW_M_CONSOLE_INFO;  
ci.lSize = sizeof(ci);  
ci.lMode = CW_MODE_GET;  
GetComWinLong(3, (LONG)(LPLONG)&ci);
```

Ű×,Í sample1.c ,đŽQÆ,μ,Ä,,¾,³,çB

(11) MakeArgument (^ø,«”i—ŠÖ”)

ŠÖ”-¼ MakeArgument

```
int FAR PASCAL MakeArgument(HANDLE hInstance,  
                             LPSTR lpszAppName,  
                             LPSTR lpszCmdParam,  
                             LPINT lpnArgv,  
                             LPSTR lpszBuffer,  
                             int cbBufSize);    // fvf[]fgf^fCfv
```

```
<@\ WinMainŠÖ” ,ìæ,R^ø”(lpszCmdParam),©,ç  
mainŠÖ” ,ì argc, argv ,đi—B
```

```
^ø” hInstance    f,fWf...[f<,lfC“fXf^f“fX(WinMain,ìæ,P^ø”)  
lpszAppName    f,fWf...[f<-¼  
lpszCmdParam fRf}f“fhfpf%of[]f^(WinMain,ìæ,R^ø”)
```

```

lpnArgv      %0q,lpaszBuffer,ÉŠi"[,³,ê,éŠe^ø",ì^Ê'u
lpaszBuffer  fRf}f"fhfpf%of[f^,ðŠi"[,·,éì<Æfofbftf@
              ("param1\0param2\0param3\0....\paramx\0\0"
              ,ìĀ`Ž®,ð,Æ,é)
cbBufSize    ì<Æfofbftf@,ìTfCfY

```

-β,è'l fRf}f"fhfpf%of[f^ [,ì"

```

'í^ó
fRf}f"fhfpf%of[f^,É,í,f,Wf...[f<-¼,ÍŠÜ,Ý,Ü,¹,ñB
f,fWf...[f<-¼,ŠÜ,Ü,ê,Ä,ç,éê±,Í hInstance = NULL ,Æ,μ,Ä
ĀÄ,Ño,μ,Ä,,¾,¾,çB

```

```

"ðl
Ž©•ª,Åi,Á,Ä,ç,κ,ì,à,È,ñ,Å,·,ªA,â,â,±,μ,çŽd—l,ìŠÖ",Å,·B
,Å,àAFARf|fCf"f^NEARf|fCf"f^,ð<ìŽg,μ,Ä«—^"l,É,àŽd—l•ìX,ð
,¹,,É,·,ÞŽd—l,Æ,ç,ì,î,±,κ,È,Á,Ä,μ,Ü,ç,Ü,μ,½B
<t,Él,ì,ê,îAWinMain,ìfRf}f"fhfpf%of[f^ [,ìĀ`Ž®,ª,
^ø",ì"(argc)A^ø",ì"z—ñ(argv),ìĀ`Ž®,ðŽæ,ç,,ÉA
'P|f,È•¶Žš—ñĀ`Ž®,ðŽæ,Á,Ä,ç,é,ì,ìA,±,ì•Ó,ìŽ-î,ª, ,é,ì,©,à,μ,ê,Ü,¹,ñB

```

úx, í sample1.c ,ðŽQÆ,μ,Ä,,¾,¾,çB

(12) cwPutenv (ŠÂ«•ï"í'èŠÖ")

ŠÖ"-¼ cwPutenv

LONG FAR PASCAL cwPutenv(LPSTR lpEnv);

<@"\ '[--f^fXfN,ìŠÂ«•ï",ðí'è,μ,Ü,·B

```

^ø" lpEnv í'è,·,éŠÂ«•ï"•¶Žš—ñ
      ŠÂ«•ï"•¶Žš—ñ,íŽŸ,ì'Ž®,ðŽæ,è,Ü,·B
env=value

```


-β,è'l □³í 0□AfGf%o□[1

'□) •ï□X,³,ê,é,ì,í'[-f^fXfN,ìšÂ««•ï□",Å,·□B
Ž©f^fXfN,ìšÂ««•ï□",ð•ï□X,μ,½,ϕ□ê□‡,Í
putenv "™,ì•W□€f%ofCfuf%ofššÖ□",ð—~—p,μ,Ä,,¾,³,ϕ□B

(13) cwGetenv (šÂ««•ï□"žæ"¾šÖ□")

šÖ□"-¼ cwGetenv

LPSTR FAR PASCAL cwGetenv(LPSTR lpEnv);

<@"\ '[-f^fXfN,ìšÂ««•ï□",ðžæ"¾,μ,Ü,·□B

^ø□" lpEnv žæ"¾,·,éšÂ««•ï□"

-β,è'l □³í šÂ««•ï□",ìfAfhfÆfX□AfGf%o□[NULL

'□) ŽQ□Æ,³,ê,é,ì,í'[-f^fXfN,ìšÂ««•ï□",Å,·□B
Ž©f^fXfN,ìšÂ««•ï□",ðŽQ□Æ,μ,½,ϕ□ê□‡,Í
getenv "™,ì•W□€f%ofCfuf%ofššÖ□",ð—~—p,μ,Ä,,¾,³,ϕ□B

(14) cwFprintf (□'Ž®•t□o—ÍšÖ□")

šÖ□"-¼ cwFprintf

LONG FAR CDECL cwFprintf(LPVOID lpInfo, LPSTR lpStr, ...);

<@"\ □'Ž®•t,«,Å•¶žš—ň,ð□o—Í,·,é□B

^ø□" lpInfo ftf@fCf<□î•ň

NULL ,ì,Æ,«•W□€□□—í□A(LPVOID)-1 ,ì,Æ,«fGf%□□[□□—í□B
,» ,ì'¼,ìfAfhfÆfX,í—\-ñ

lpStr □□—í, ,é□'Ž®•t,« ,ì•¶Žš—ñ

-ß'í □□—í,μ,½•¶Žš□"□AfGf%□□[Žž,í -1

—á

cwFprintf(NULL, "(x, y) = (%d, %d)\n", x, y);

'□^ÓŽ-□€

□□—í,Å,« ,é•¶Žš□" ,í 1024 •¶Žš,Ü,Å,Å, .□B

cwFprintf ,ð—~—p, ,é□ê□#□Af,fWf...□[f<'è<'ftf@fCf<,É

IMPORTS comwin._cwFprintf ,Æ<L□q,μ,Ä,,¾,¾,ç□B

ÆÄ,Ñ□□,μ□#□~ ,ª CDECL Œ`Ž® ,È,ì,Å

ŠÖ□" -¼,ì'O ,É ' ' (fAf"f_□[fXfRfA) ,ª•K—v,Å, .□B

cwFprintf ,íffffbfOfT□[frfXAPI,Æ,μ,Ä'ñ<Ÿ,μ,Ä,ç,Ü, .□B

□³Ž®fŠfŠ□[fX—p,ìf,fWf...□[f<"à,ÅŽg—p, ,é,±,Æ,í, "E,ß,Å,« ,Ü,¹,ñ□B

(15) cwFputsW (Unicode□□—íŠÖ□□)

ŠÖ□□ -¼ cwFputsW

LONG FAR PASCAL cwFputsW(LPWSTR lpStr, LPVOID lpInfo);

<@"\ ftf@fCf<,É Unicode•¶Žš—ñ,ð□□—í,μ,Ü, .□B

^ø□" lpStr □□—í, ,é•¶Žš—ñ

lpInfo ftf@fCf<□î•ñ

-ß,è'í □³□í□A□□—í,μ,½•¶Žš□"

fGf%□□[□A-1

lpInfo = NULL ,ìŽž□A•W□€□□—í

lpInfo = (LPVOID)-1 ,ižžA•W€fGf%o[]o—í

(16) cwFgetsW (Unicode“ü—ÍŠÖ”)

ŠÖ”-¼ cwFgetsW

LPWSTR FAR PASCAL cwFgets(LPWSTR lpStr, LONG lSize, LPVOID lpInfo);

<@\ ftf@fCf<, ©,ç Unicode•¶žš—ñ,đ“ü—í,μ,Û,·B

^ø” lpStr “ü—í,·,é•¶žš—ñ,ì,½,β,ìfofbftf@
lSize fofbftf@fTfCfY
lpInfo ftf@fCf<î•ñ

-β,è'l []í[]AlpszS
fGf%o[][]ANULL

lpInfo = NULL ,ižžA•W€“ü—í
lpInfo = (LPVOID)-1 ,ižžA•W€fGf%o[]“ü—í

(17) CallCommand(%¼ì) (“à•”fRf}f“fh’ñ<ŸŠÖ”)

ŠÖ”-¼ CallCommand(-β,è'l[]A^ø”,ìĈ^,è^è’v,μ,Ä,ç,ê,î[]AŠÖ”-¼,í”C^Ó)

BOOL FAR PASCAL CallCommand(FARPROC FAR *lpfnProc,
LPSTR lpszCmdParam,
LPLONG lpReturn); // fvf[]fgf^fCfv

<@\ ComWin, ©,çĈÄ,Ñ[]o,³,ê,é“à•”fRf}f“fh,đ’ñ<Ÿ,μ[]A
[]o—íĈ<%oÊ,đComWin,É•\ž!,μ,Û,·B

```

^0" lpfProc ComWin, ©, ěžó, ěžæ, é"üo—íšö", Ö, ðfAfhfÆfX, ð"z—ñ
Æ»ÝŽŸ, ð10, íšö", æ'è<`³, ê, Ä, ç, Ü, ·B
Puts = lpfProc[0]; /* ^È%º Ver 1.80 ^È~ */
Gets = lpfProc[1];
Fputs = lpfProc[2];
Fgets = lpfProc[3];
System = lpfProc[4];
CallConsole = lpfProc[5];
Getch = lpfProc[6]; /* ^È%º Ver 2.30 ^È~ */
Inkey = lpfProc[7];
Fwrite = lpfProc[8]; /* ^È%º Ver 2.60 ^È~ */
Fread = lpfProc[9];

```

```

lpszCmdParam fRf}f"fhfpf%of[]f^
(WinMain, ðæ, R^0", Æ" , ð, Ä, ·, æA
fRf}f"fh-¼, à, í, ç, è, Ü, ·B)
lpReturn[0] ŠefRf}f"fh, ðGf%o[]'l

```

```

-ß, è'l TRUE fRf}f"fh, ðDLL"à•", Ä^—, µ, ½B
FALSE fRf}f"fh, ðDLL"à•", Ä^—, , ÉŽŸ, ðDLL, ÖfXf<[] , ·, éB

```

```

"ö| , ±, íšö", ðEXPORT, µ, ½DLL, ícomwins.dll, È, Ç, ð¼, ðDLL, Æ•¹—
p, Ä, «, Ü, ·B
«—^"l, É, íšöDLL, æfTf|[]fg, µ, Ä, ç, éfRf}f"fh, ðŠÇ—, ·, é•K—v, æ, Ä, Ä, , é, Æ
Žv, í, ê, é, ð, ÄAŽŸ, ð<@"\, à, à, ½, ¹, Ä, , ¾, ³, çB
-Ê"l, Èê±, í-³Ž<, µ, Ä, à"Á, É-â'è, í, , è, Ü, ¹, ñB
(comwins.dll, í, ±, ð<@"\, ðŽ, Á, Ä, ç, Ü, ·B)

```

```

lpReturn[0] == 0, lpszCmdParam[0] == 0, ðê±, í
fTf|[]fg, µ, Ä, ç, éfRf}f"fh-¼, ð1, Ä, ¾, -
lpszCmdParam, ÉfRfs[] , µ, ÄTRUE, ð•Ô, µ, Ä, , ¾, ³, çB
TRUE, ð•Ô, µ, Ä, ç, éŠÔ, íComWin, íŽŸ, ðfRf}f"fh-¼, ð—v<[] , µ, Ä, «, Ü, ·B
fRf}f"fh-¼, ð, ·, x, Ä•Ô, µ[]l, í, Á, ½, ç FALSE , ð•Ô, µ, Ä, , ¾, ³, çB
( , ±, ð<@"\, íÆ»Ý help fRf}f"fh, ÄŽg, í, ê, Ä, ç, Ü, ·B)

```

```

«—^ , ðšg'£« , ð, ½, ß^È%º, ð^—, ð, µ, Ä, , ¾, ³, çB

```

```

switch (lpReturn[0]) {
    case -1:
        /* fCf" ^ — */
        break;
    case 0:
        /* fwf<fv ^ — */
        break;
    default:
        /* —\-ñ */
        break;
}

```

œÄ,Ño,µ—á
 unix.dll ,Å command ,ðEXPORT,µ,Ä,ç,éê#B

comwin.ini ,ì [CommandDll],ÉŽŸ,ì<Lq,ð%oÁ,ì,éB
 [CommandDll]

a.dll=b ;¼,ìcommand.dll
 unix.dll=command
 c.dll=d ;¼,ìcommand.dll

æ,É',©,ê,½command.dll,ìfRf}f"fh,ª—Dæ,³,ê,Ü,·B

Úx,í sample3.c ,ðŽQÆ,µ,Ä,,¾,³,çB

(18) CallInterpreter(%¼ì) (fRf}f"fh%ðŽß' ñ<ŸŠÖ")

ŠÖ"-¼ CallInterpreter(-ß,è'lA^ø",)CE^,ª^ê'v,µ,Ä,ç,ê,îAŠÖ"-¼,í" C^Ó)

```

BOOL FAR PASCAL CallInterpreter(FARPROC FAR *lpfnProc,
                                  LPSTR lpszCmdParam,
                                  LPLONG lpReturn); // fvf^fgf^fCfv

```

<@"\ ComWin,©,ç"n,³,ê,½•¶Žš—ñ,ð

CEÂX,lfRf}f“fh,É•%øð,μ,½•¶Žš—ñ,É,μ,Ä•Ô,μ,Ü,·B

^ø” lpfProc ComWin,©,çŽó,~Žæ,é“üo—ÍŠÖ”,Ö,lfAfhfCEfX,ì”z—ñ
CE»ÝŽÿ,ì7,Â,ìŠÖ”,æ’è<` ,³,ê,Ä,ç,Ü,·B
Puts = lpfProc[0];
Gets = lpfProc[1];
Fputs = lpfProc[2];
Fgets = lpfProc[3];
System = lpfProc[4];
(-ç’è<`) lpfProc[5];
Getch = lpfProc[6];
Inkey = lpfProc[7];
(CallInterpreter “à,Â,ífffofbfOŽž^ÈŠO,Í•s—v,Â,·B)

lpszCmdParam fRf}f“fh•¶Žš—ñ
(WinMain,ì’æ,R^ø”,Æ“ ,¶,Â,·,æA
fRf}f“fh-¼,à,Í,ç,è,Ü,·B)
lpReturn[0] •%øð,μ,½fRf}f“fhCEQ,Ö,ìfjCf“f^
fRf}f“fhCEQ,ÍŽÿ,ìCE`Ž®,Â•Ô,μ,Ä,,¾,¾,çB
"cmd0\0cmd1\0cmd2\0...cmdx\0\0"

-ß,è’ TRUE □¬CE÷
FALSE fGf%o□[“□¶

”ö| ,±,ìŠÖ”,ðEXPORT,μ,½DLL,lfRf}f“fh%øðŽß,ì«Šiã
^ê,Â,μ,©Žg—p,Â,«,Ü,¹,ñB

lpReturn[0] == 0 && lpszCmdParam[0] == 0 ,ìê±
fRf}f“fhCEQ,ì—ì^æ,æ GlobalAlloc “™,ÂŠm•Û,³,ê,Ä,ç,ê,îA
ŠJ•ú,μ,Ä,,¾,¾,çB

□«—^,ìŠg’£«,ì,½,ß^È%ø,ì^—□,ð,μ,Ä,,¾,¾,çB
switch (lpReturn[0]) {
case -1:
/* fCf“^—□ */
break;
case 0:

```

        /* %ođ•ú□^—□ */
        break;
default:
        /* —\-ñ */
        break;
}

```

☐Ä,Ñ□o,μ—á
 unix.dll ,Å intepreter ,đEXPORT,μ,Ä,ϕ,é□ê□#□B

comwin.ini ,ì [InterpreterDII],ÉŽŸ,ì<L□q,đ%oÁ,ì,é□B
 [InterpreterDII]
 unix.dll=interpreter

^ê"Ô□Å□%o,É□',©,ê,½interpreter.dll,ìŠÖ□",^a—D□æ,³,ê,Ü,·□B

□Ú□×,í sample3.c ,đŽQ□Æ,μ,Ä,,³/₄,³,ϕ□B

(19) CallScript(%o¼□ì) (fXfNfŠfvfg'ñ<ŸŠÖ□")

ŠÖ□"—¼ CallScript(-β,è'ì□A^ø□"),ì☐^,^a^ê'v,μ,Ä,ϕ,ê,ì□AŠÖ□"—¼,ì"C^Ó)

```

BOOL FAR PASCAL CallScript(FARPROC FAR *lpfnProc,
                            LPSTR lpszCmdParam,
                            LPLONG lpReturn); // fvf□fgf^fCfv

```

<@"\ ComWin,©,ç'ñ<Ÿ,³,ê,½ftf@fCf<,đfXfNfŠfvfg%ođŽβ,μ□AŽÀ□s,μ,Ü,·□B

```

^ø□" lpfnProc    ComWin,©,çŽó,~Žæ,é"ü□o—íŠÖ□",Ö,ìfAfhf☐fX,ì"z—ñ
☐☐>□ÝŽŸ,ì,T,Ä,ìŠÖ□",a'è<`3,ê,Ä,ϕ,Ü,·□B
Puts    = lpfnProc[0];
Gets    = lpfnPorc[1];
Fputs   = lpfnProc[2];
Fgets   = lpfnProc[3];

```

```
System = lpfProc[4];
(-ç'è<`) lpfProc[5];
Getch = lpfProc[6];
Inkey = lpfProc[7];
```

```
lpszCmdParam fXfNfŠfVfgftf@fCf<+fpf%of[]f^
(ftf<fpfX,ÅfXfNfŠfVfgftf@fCf<,ª—,ç,è,Ü,·[]B)
```

```
lpReturn[0] ŠefRf}f“fh,lfGf%o[]'l
```

```
-ß,è'l TRUE fRf}f“fh,ðDLL“à•”,Å^—[],µ,½[]B
FALSE fRf}f“fh,ðDLL“à•”,Å^—[],¹,,ÉŽŸ,ìDLL,ÖfXf<[],·,é[]B
```

```
“õ[] | ,±,ìŠÖ[]”,ðEXPORT,µ,½DLL,Ícomwins.dll,È,Ç,ì¼,ìDLL,Æ•¹—
p,Å,«,Ü,·[]B
```

```
ŠefXfNfŠfVfgDLL,ÍŠg'£Žq,É,æ,Á,ÄŽ©•ª,ì^—[],·,éftf@fCf<,ðŠÇ—
[],µ,Ü,·[]B
```

```
(Šg'£Žq,É,æ,éftf@fCf<,ìª—p,í NT “™”,lf[]f“fOftf@fCf<f[]f€,Å,à
[]s,í,è,é,ì,Å^ê”Ô'Ä“-È•û-@,Å,·[]B)
```

```
lpReturn[0] == 0 && lpszCmdParam[0] == 0 ,ìê[]‡,Í
fTf|[]fg,µ,Ä,ç,éŠg'£ŽqEQ,lf|fCf“f^,ð lpReturn[0] ,É
,ç,è,Ä•Ô,µ,Ä,,¾,³,ç[]B
Šg'£ŽqEQ,ì€`Ž®,í "ex0\0ex1\0...ex9\0\0" ,Æ,ç,æ€`Ž®,Å,·[]B
```

```
[]«—^,ìŠg'£[]«,ì,½,ß^È%o°,ì^—[],ð,µ,Ä,,¾,³,ç[]B
```

```
switch (lpReturn[0]) {
    case -1:
        /* f[]fCf“^—[] */
        break;
    case 0:
        /* fwf<fv^—[] */
        break;
    default:
        /* —\-ñ */
```



```
        break;
    }
```

```
CEÄ,Ñ□o,μ—á
macro.dll ,Å macro ,ðEXPORT,μ,Ä,ç,é□ê□#□B
```

```
comwin.ini ,ì [ScriptDll],ÉŽŸ,ì<L□q,ð%oÁ,!,é□B
[ScriptDll]
```

```
a.dll=b ;¼,ìscript.dll
```

```
macro.dll=macro
```

```
c.dll=d ;¼,ìscript.dll
```

```
□æ,É□',©,ê,½script.dll,ìfRf}f“fh,ª—D□æ,³,ê,Ü,·□B
```

```
□Ú□×,í sample3.c ,ðŽQ□Æ,μ,Ä,,¾,³,ç□B
```

(20) CallCommand ('[---pfRf}f“fh□^—□ŠÖ□”)

ŠÖ□”-¼ CallCommand

```
BOOL FAR PASCAL CallCommand(FARPROC FAR *lpfnProc,
                              LPSTR lpszCmdParam,
                              LPLONG lpReturn); // fvf□fgf^fCfv
```

```
<@”\ '[---‘α,É“ü—Í,³,ê,½•¶Žš—ñ,ð comwin.dll ,ð“n,·□B
```

```
^ø□” lpfnProc    comwin.dll,É’ñ<Ÿ,·,é“ü□o—ÍŠÖ□”,Ö,ìfAfhfCEfX,ì”z—ñ
CE»□ÝŽŸ,ì10,Ä,ìŠÖ□”,ª’è<` ,³,ê,Ä,ç,Ü,·□B
```

```
lpfnProc[0] = LocalPuts;
```

```
lpfnPorc[1] = LocalGets;
```

```
lpfnProc[2] = LocalFputs;
```

```
lpfnProc[3] = LocalFgets;
```

```
lpfnProc[4] = LocalSystem;
```

```
lpfnProc[5] = LocalCallCommand;
```

```
lpfnProc[6] = LocalGetch;  
lpfnProc[7] = LocalInkey;  
lpfnProc[8] = LocalFwrite;  
lpfnProc[9] = LocalFread;
```

```
lpszCmdParam fRf}f“fh•¶Žš—ñ
```

```
lpReturn[0] ŠefRf}f“fh,lfGf%o[]'l
```

```
-ß,è'l TRUE fRf}f“fh,đ□³□í,É□^—□,μ,½□B  
FALSE fRf}f“fh,ì□^—□'†,É^Ù□í,ª”□¶,μ,½□B
```

```
”õ□l
```

```
comwin.dll ,l“à•”,Å•;ŽG,ÈXfPfwf...[]fšf“fo□Afvf□fZfXšÇ—□,đ  
□s,Á,Ä,č,é“s□#□ã,É-¾Ž!“l,È“o~^□AšJ•ú□^—□,đ□s,í,È,č,Æ  
f□f,fš,©,çšJ•ú,³,ê,È,č•”•ª,ª□o,Ä,«,Ü,·□B
```

```
[-¾Ž!“l,È“o~^]  
CW_S_CONSOLE_INFO ci; /* f□fbfZ□[fWfPfpPfbfg */  
memset(&ci, 0, sizeof(ci));  
ci.lMessage = CW_M_CONSOLE_INFO;  
ci.lSize = sizeof(ci);  
ci.lMode = CW_MODE_INIT; /* □%ošú%o» */  
lpszCmdParam[0] = 0;  
CallCommand(lpfnProc, lpszCmdParam, (LPLONG)&ci);
```

```
[-¾Ž!“l,ÈšJ•ú]  
CW_S_CONSOLE_INFO ci; /* f□fbfZ□[fWfPfpPfbfg */  
memset(&ci, 0, sizeof(ci));  
ci.lMessage = CW_M_CONSOLE_INFO;  
ci.lSize = sizeof(ci);  
ci.lMode = CW_MODE_CLEAR; /* %ođ•ú */  
lpszCmdParam[0] = 0;  
CallCommand(lpfnProc, lpszCmdParam, (LPLONG)&ci);
```

```
'Ê□í,ìĀÄ,Ñ□o,μ
```

```
lpReturn[0] = -1;
CallCommand(lpfnProc, lpCmdParam, lpReturn);
```

```
Úx, í sample5.c , đŽQÆ, μ, Ä, , ¾, ¾, çB
```

```
(ŠÖ" • â'«) ffbfZ[fWfpfPfbfg, É, Â, ç, Ä
```

```
fbfZ[fWfpfPfbfg, Æ, Í[ --'x, ÆfRf}f"fh'x, Åî•ñ, ì, â, è, Æ, è, đ
s, x, ½, ß, Él^ Ä, ¾, ê, ½ff[f^ [ , ÌŽó, ~"n, μ•û-@, Å, ·B
%ß<Ž, Æ, ÌŸŠ·« , đdŽ<, μA«—^ , Ö, ÌŠg'£, %Ä"\, È\ç, É, È, Á, Ä, ç, Ü, ·B
```

```
fbfZ[fWfpfPfbfg, íŽŸ, ÌŸŽ® , đ, Æ, è, Ü, ·B
```

```
struct PACKET {
    LONG IMessage; /* •K{ fbfZ[fW"Ô†, đŸ'è, ·, é */
    LONG ISize /* •K{ fpfPfbfg, ÌTfCfY, đŸ'è, ·, é */
    ... /* ŠefbfZ[fW, É'Í%Ž, μ, ÄŽ©—R, ÉŸ'è, ·, é */
}
```

```
CallCommand , Ìæ, R^ø"AGetComWinLong , Ìæ, Q^ø" , ÉŽg, í, ê, Ü, ·B
```

```
ŸŸAcomwin.h , ÄŽŸ, Ìæ, x, Éé¾, ¾, ê, Ä, ç, Ü, ·B
```

```
/* Message */
#define CW_M_EXEC          0xFFFFFFFF
#define CW_M_HELP         0x00000000
#define CW_M_CONSOLE_INFO 0x00010001
#define CW_M_ISATTY       0x00010002
#define CW_M_UNICODE_ENTRY 0x00010003
#define CW_M_USER_FIRST   0x10000000
#define CW_M_USER_LAST    0x7FFFFFFF
/*
    0x00000001 - 0x0000FFFF reserved
    0x00010002 - 0x0FFFFFFF system reserved
    0x10000000 - 0x7FFFFFFF user area
```

```

        0x80000000 - 0xFFFFFFFF reserved
*/

/* Mode */
#define CW_MODE_CLEAR 0
#define CW_MODE_INIT 1
#define CW_MODE_SET 2
#define CW_MODE_GET 3

/* Message Structure */
typedef struct CW_S_CONSOLE_INFO
        CW_S_CONSOLE_INFO,
        FAR *LP_CW_S_CONSOLE_INFO;

struct CW_S_CONSOLE_INFO {
        LONG IMessage; // Message Number (=
CW_M_CONSOLE_INFO)
        LONG ISize; // Structure size (=
sizeof(CW_S_CONSOLE_INFO))
        LONG IMode; // Calling mode (= CW_MODE_XXXX)
        LONG IFuncMax; // Max Function Count ( >= 6)
        LONG IBufMax; // Max Buffer Size ( for Gets API etc)
        DWORD hwnd; // Window Handle of Console
        LONG IColumns; // Columns of Console
        LONG ILines; // Lines of Console
        LONG IWidth; // Width of Console
        LONG IHeight; // Height of Console
};

typedef struct CW_S_ISATTY
        CW_S_ISATTY,
        FAR *LP_CW_S_ISATTY;

struct CW_S_ISATTY {
        LONG IMessage; // Message Number (= CW_M_ISATTY)
        LONG ISize; // Structure Size (= sizeof(CW_S_ISATTY))

```

```

    LONG  IMode;        // Calling Mode (= CW_MODE_GET)
    LONG  IStdIn;      // TRUE, if StdIn is atty.
    LONG  IStdOut;     // TRUE, if StdOut is atty.
    LONG  IStdErrIn;   // TRUE, if StdErrIn is atty.
    LONG  IStdErrOut;  // TRUE, if StdErrOut is atty.
};

/* Message Structure */
typedef struct CW_S_UNICODE_ENTRY
           CW_S_UNICODE_ENTRY,
           FAR *LP_CW_S_UNICODE_ENTRY;

struct CW_S_UNICODE_ENTRY {
    LONG  IMessage;    // Message Number (=
CW_M_UNICODE_ENTRY)
    LONG  ISize;      // Structure size
    LONG  IMode;      // Calling mode (= CW_MODE_XXXX)
    LONG  IFuncMax;   // Max Function Count ( >= 6)
    LONG  IBufMax;    // Max Buffer Size ( Not used)
};

```

15. ŽÓŽ«

ComWin [, ©, P, î, ñ] Ver. 3.51 ,ì\$ì,É, ,½,Á,ÄŽÿ,ì•û,ÉŠ´ŽÓ,µ,Ü,·B
³<Kft[fU[“o~^,µ,Ä,,¾,¾,Á,½ŠF,¾,ñA
<M[d,È^ÓŒ©,ð,,¾,¾,Á,½ŠF,¾,ñA
%oÆ‘°B

“Á,É IRUKAŽA-,|,Ô,αŽA•ÛâŽAy.ohmŽA
, ,ë,Á,ÒŽA,“,ÆŽA,±,ÎŽAO.KimuraŽA
<v%o°ŽAH.KurokawaŽA-ö^äŽAshunŽA
THoŽAZR-{ŽA%ó!“¶,ìŽO~YŽAî^äŽ,É,Í
ComWin —p,ì•Ö—~,Èfc[f<ŒQ,ð’ñ<ÿ,µ,Ä,ç,½,¾,¾,«,Ü,µ,ÄA
½,ÉŠ´ŽÓ,µ,Ä,“,è,Ü,·B
fc[f<ŒQ,Í Nifty FWINAL, FWINNT, FGALTS ,ÉŒöŠj,¾,è,Ä,“,è,Ü,·B

[Ž’—¿ ComWin fc[f<ŒQ] (96/12/05 Œ»Ý)
NIFTY-Serve FILEFIND (COMWIN or COMWIN32 or TOOLMAN)
,ÅŒÿð,µ,Ü,µ,½B

- 1 SGQ00310 96/12/02 280488 B TMEDT137.LZH UnicodefGfffBf^
ToolMan
- 2 SGQ00310 96/12/02 280645 B TMEDT136.LZH UnicodefGfffBf^
ToolMan
- 3 SGQ00310 96/10/28 272412 B TMEDT135.LZH Unicode
•ÒW,^óü,ToolMan
- 4 SGQ00310 96/10/19 268294 B TMEDT134.LZH ‘½’Œê,Unicode•ÒW
%oÂToolMan
- 5 SGQ00310 96/10/13 386135 B COMWP332.LZH fX[fP[fRf“fA
[f<ComWin32
- 6 SGQ00310 96/10/13 288763 B COMW0332.LZH
fRf}f“fhf}f[fWffComWin16
- 7 SGQ00310 96/10/05 262566 B TMEDT131.LZH Win95,Å“®,-
UnicodefGfffBf^
- 8 SGQ00310 96/08/20 384407 B COMWP322.LZH
½°Êß°ôÿ¿°ÛComWin32

9	SGQ00310	96/06/06	289216	B	CWUTL110.LZH	Â°Ûÿ UNIX Like fc[f<W
10	SGQ00310	96/06/06	273999	B	CWADD110.LZH	Â°Ûÿ fAfhfif“fc[f<W
11	SGQ00310	96/06/05	23877	B	CWWB0110.LZH	WinBatchEh,ÅComWin,ð“®,©,·
12	QGB01167	96/05/02	10408	B	CLHA .LZH	CHA for ComWin32
13	QZE03533	96/03/27	21090	B	CWMR3223.LZH	More for ComWin32 V2.3
14	QZE03533	96/01/22	19092	B	CWMR3210.LZH	More command for ComWin32
15	SGQ00310	95/12/01	176054	B	COMWS270.LZH	ComWin 2.70 Å—fpfbfN
16	SGQ00310	95/11/20	308811	B	TMEDT090.LZH	Win95—p UNIX tools fGfffBf^
17	SGR00045	95/11/15	27708	B	CCAL01 .LZH	ÆvŽZUTY for ComWin / Delphi
18	SGQ00310	95/10/05	9175	B	TULCW100.LZH	UNIX tools ComWinfAf_fvf^
19	SGQ00310	95/10/04	252331	B	TOOLD100.LZH	UNIX tools V1.00 fc[f<f}f“
20	SGQ00310	95/10/04	17280	B	TULNT100.LZH	UNIX tools °Ý;°Û±ÀpìßÀ
21	SGQ00310	95/10/04	9175	B	TULCW100.LZH	UNIX tools ComWin fAf_fvf^
22	KHB16456	95/09/15	13421	B	DINFW101.LZH	□TŠÔ²íPÝÄ¶ÚÝÀP° for ComWin
23	QZE03533	95/09/10	7743	B	CWMOR121.LZH	MORE for ComWin V1.21
24	PXG02372	95/09/08	27688	B	XCD_140 .LZH	ComWinŠg’EDLL XCD + MV V1.4
25	SGQ00310	95/09/04	9110	B	GRLD_100.LZH	”Ä—p%œ’æf□□[f_,f,k/ComWin
26	SGQ00310	95/08/29	67665	B	CLIPF100.LZH	,Ø`ìßîP°ÄP¥ì“ÙÀ°¥Â°Û
27	SGQ00310	95/08/29	49880	B	CWGREP13.LZH	•¶Žš—ñÆÿ□öÂ°Û CW- Grep
28	SGQ00310	95/08/29	48107	B	WNDST103.LZH	³“ÝÄP³î•ñ•\Ž;Â°Û

29	SGQ00310	95/08/24	66784 B MSQ_107D.LZH f,fWf...
	[f<[\`çi}Â°Ù1.07		
30	PXG02372	95/08/14	8767 B TREE110 .LZH TREE for ComWin
	Ver1.10		
31	PXG02372	95/08/14	13019 B TR32_110.LZH TREE for ComWin32
	1.10		
32	SGQ00310	95/08/04	111415 B XTR150EC.LZH Ã·½ÄÂ°Ù XTR/ComWin
33	PXI05647	95/07/31	4310 B PR101 .LZH PR.EXE Ver.1.01
34	SGR01060	95/06/30	29501 B DFRUN100.LZH dfrun for ComWin 2.30
35	SGQ00310	95/06/18	146627 B COMWB230.LZH ComWin Ver. 2.30fÀ
36	SGQ00310	95/04/16	169472 B CSED_118.LZH GNU sed 1.18 / Win
37	SGQ00310	95/04/16	672384 B CGAWK215.LZH GNU awk 2.15 / Win
38	SGQ00310	95/04/16	130176 B CPATC210.LZH GNU patch 2.1 / Win
39	SGQ00310	95/04/16	220800 B CGREP200.LZH GNU grep 2.0 / Win
40	SGQ00310	95/04/07	17664 B COMW32UT.LZH
	ComWin32UT+32bitfSf~"		
41	PXI05647	95/04/06	5279 B FINDF100.LZH ComWin—
	pìš²ÙĈÿ[]òìßÙ ,p×Ñ		
42	GHC01120	95/03/21	15307 B CWARC100.LZH ComWin—p±°¶²ìp[]^—
	[] DLL		
43	PXU04517	95/03/16	7506 B FILECHK .EXE ìš²Ù[]Ú[]×·\Ž! for ComWin
44	SGQ00310	95/03/08	604544 B TOOLW001.LZH UNIX tools (Žb'è"Å)
45	KFB02700	95/02/25	5417 B CLIPASTE.LZH
	ComWin,ì/O,đ,Ø`ìßîp°Äp,É		
46	MHA03413	95/02/12	12289 B CWWAV110.LZH
	ComWin,ÅWave&Beep,đ[]Ä[]¶		
47	MHA03413	95/02/12	12289 B CWWAV110.LZH
	ComWin,ÅWave&Beep,đ[]Ä[]¶ Ver		
48	GHC01120	95/02/03	10068 B CWSX010 .LZH ComWin—
	pfXfNfšfjfgšg'£DLL		
49	HBB01117	95/01/28	27310 B SPLIT100.LZH split/merge for COMWIN
50	SGQ00310	95/01/25	9216 B CWGREP12.LZH fpfCfv<@"\•t,« GREP—
	vComWin		
51	SGQ00310	95/01/25	9088 B CWGREP11.LZH fpfCfv,ªŽg,!,éGREP—
	vComWin		
52	PXG02372	95/01/21	7876 B TSC100 .LZH f^fCf€fXf^f"fv•ï[]X FOR

COMW

53 PXG02372 95/01/21 7841 B ATTRB110.LZH ATTRIB FOR COMWIN
54 PXI01263 95/01/12 6349 B AL100 .LZH Ī,Ū“WŠj×ÝÁ→ for ComWin

V1

55 SGQ00310 94/12/27 4864 B WNDST100.LZH
fEfBf“fhfE□î•ñ,đfcfŠ□[•\Ž!
56 MAG00562 94/12/12 92762 B WLS .LZH ls.exe for
Windows(comwin)
57 SGQ00310 94/12/08 5632 B DBCWIN09.LZH
□G,ìfffofbfO•¶,đCOMWIN,É
58 MAG00562 94/12/05 22485 B GDF .LZH Āp“½, —e—Ê•\Ž! for
COMWIN

59 MAG00562 94/12/05 25950 B WHERE .LZH ìš²ÙĈËŸ□ö for
Windows(comwin)
60 MAG00562 94/12/05 24970 B DUMP .LZH dump for
Windows(comwin)
61 MAG00562 94/12/05 19657 B WINLHA .LZH LHA for
Windows(comwin)
62 MAG00562 94/11/20 32174 B WUNZIP .LZH UNZIP for
Windows(COMWIN)

63 MAG00562 94/11/20 52271 B COMW32AD.LZH COMWIN—p 32bit
%o»fAf_fvf^□[
64 SGQ00310 94/08/05 2688 B COMWE130.LZH ComWin—
pŠg'£ºİŸÄpDLL

1 SGQ00310 96/12/02 280645 B TMEDT136.LZH UnicodefGfffBf^
ToolMan
2 SGQ00310 96/12/02 280488 B TMEDT137.LZH UnicodefGfffBf^
ToolMan
3 SGQ00310 96/10/21 268294 B TMEDT134.LZH Win95,Å“®,-
UnicodefGfffBf^
4 SGQ00310 96/10/13 386135 B COMWP332.LZH fX□[fp□[fRf“fĀ
□[f<ComWin32
5 SGQ00310 96/10/05 262566 B TMEDT131.LZH Win95,Å“®,-
UnicodefGfffBf^
6 SGQ00310 96/08/21 249975 B TMEDT122.LZH
f}f<f`fR□[fh•İ□gfGfffBf^

7 KFB02700 96/08/10 126813 B WBCMD110.LZH ComWin32—
pWinBatchEh•—°ÿÄþ

8 SDI00862 96/08/09 161802 B TMEDT104.LZH °ÿ¿°Ù
'Äþ"À[fç[f<f}]f"V1.04

9 SGQ00310 96/08/04 234149 B TMEDT121.LZH
f}f<fefBfR[fhfGfffBf^V1.21

10 SGQ00310 96/07/21 229069 B TMEDT120.LZH
'ÊM+HTML+fGfffBf^V1.20

11 KFB02700 96/07/14 102149 B WBCMD060.LZH ComWin32—
pWinBatchEh•—°ÿÄþ

12 SGQ00310 96/07/05 213841 B TMEDT114.LZH fç[f<f}]f"V1.14
HTMLŽx%o‡

13 SGQ00310 96/06/22 203142 B TMEDT112.LZH
fç[f<f}]f"fGfffBf^V1.12

14 SGQ00310 96/05/24 187790 B TMEDT106.LZH
fç[f<f}]f"fGfffBf^V1.06

15 SGQ00310 96/05/14 182224 B TMEDT105.LZH
fç[f<f}]f"fGfffBf^V1.05

16 SGQ00310 96/05/06 161802 B TMEDT104.LZH
fç[f<f}]f"fGfffBf^V1.04

17 SGQ00310 96/04/16 22389 B CWWB0103.LZH
WinBatchEh,ÅComWin,đ"®,©,·

18 SGQ00310 96/04/08 363362 B COMWP302.LZH
ComWin32,Å¼ªÙìßÛ,þ×ĐÝ,þ

19 SGQ00310 96/03/04 297742 B COMW0300.LZH csh'Š"—
½,ØìßÄŠÅ«ComWin

20 SGQ00310 95/11/20 308811 B TMEDT090.LZH fç[f<f}]f"fGfffBf^

21 SGQ00310 95/09/07 288296 B COMW0252.LZH
Win,ÅuprintfVComWin

22 SGQ00310 95/08/18 280847 B COMW0251.LZH DOSf\ftfg,à"®,!!
ComWin

23 KFB02700 95/07/26 7072 B CWSPACK1.LZH ComWin—pfofbf`W(—
vgawk)

24 SGQ00310 95/07/10 276631 B COMW0240.LZH '½<@"\
°ÿÄþÏÈ°¼þ¬ComWin

25 SGQ00310 95/06/25 270564 B COMW0230.LZH "Ä—

p(AP,WIN,FILE)¼ªÙComWin

26 SGQ00310 95/06/18 146627 B COMWB230.LZH °Ý¿°Ù´ÐÚ°À ComWin

fÀ

□;Œã,Æ,à□A•s”õ,È“_ ,đ,Ç,ñ,Ç,ñ%ü—Ç,μ,Ä,ç,« ,½,ç,ÆŽv,ç,Ü,·,ì,Å□A
ŠF,³,ñ□A,æ,ë,μ,,“Šè,ç,μ,Ü,·□B

‘OŽ>□³•F <SGQ00310@niftyserve.or.jp>

fAfCfRf“,ì—R—^

ComWin ,ìfAfCfRf“,í□A□E□è,ì‘qŒÉ,Éš°,đ,©,Ô,Á,Ä-,,,à,ê,Ä,ç,½
"-{•"" ,ì VT-100 '[-- ,đfCf□□[fW,μ,ÄfffUfCf“ ,μ,Ü,μ,½□B
Ž,,,ª-Ú,ì“- ,½,è,ÅVT-100 '[-- ,đŒ© ,½,ì,í,±,ê,ª□Å□%o,Å□ÅŒã,Å,μ,½,ì,Å,
(,ç,Ü,» ,ì‘qŒÉ,É□s,Á,½,Æ,±,ë,ÅŽÀ•“ ,ªŽc,Á,Ä,ç,é,©,Ç,κ,©,í,©,è,Ü,¹,ñ□B□j
ŽÀ•“ ,Æ□Ú□x•“•ª,í^á,κ,ÆŽv,ç,Ü,·,ª□AfCf□□[fW,¾,¯ ,í<—ó,ÉŽc,Á,Ä,ç,Ü,·□B

1990”N‘ã,à”¼,î,đ,·,¬,½,ç,Ü□A<—í,È GUI ,đ•”õ,μ,½ OS ,ª
□”“½,‘íđ,Å,« ,é,æ,κ,É,È,è,Ü,μ,½□B
,μ,© ,μ□A,Ç,ì GUI ,à^ì‘ã,È□æ□l’B,ªfLfff%ofNf^'[-- ,đ‘€□ì,μ,È,ª,ç
—l□X,È‘z‘œ,đ□,,,ç,μ,½Œ<%oÊ□A□¶,Ý□o,³,ê,½,±,Æ,ÉŠÔ^á,ç,í, ,è,Ü,¹,ñ□B

ComWin ,íft□[fU□[,É‘í,μ,Ä-³^κ‘z,Èfvf□f“fvfg,μ,© ‘ñ<Ÿ,μ,Ü,¹,ñ,ª□A
,±,ì-³^κ‘z,³ ,íft□[fU□[,ìŽ©—R,È”‘z,đ,Ü,Á,½,‘©”>,μ,Ü,¹,ñ□B
ComWin ,đŽg—p,·,é,±,Æ,ªŽŸ□ç‘ăfRf“fsf...□[fefBf“fO,ì□V,½,È,é”‘z,ì
^ê•“ ,Æ,È,é,±,Æ,đ□S,© ,çŠè,Á,Ä,“ ,è,Ü,·□B

