

fRf}f“fhf%ofCf“fRf“fpfCf%o,İŽg,č•û

ŠÖ~A□€-Ú

C++Builder ,É,□CBorland C++ ,İfRf}f“fhf%ofCf“fRf“fpfCf%o BCC32.EXE ,ªŠÜ,Ü,ê,Ä,č,Û,·□B

fRf}f“fhf%ofCf“fRf“fpfCf%o,İ□•¶

BCC32 ,İ□•¶,İŽÿ,İ,Æ,“,è,Ä,·□B

- BCC32 [<flfvfVf#f“> [<flfvfVf#f“> ...]] <ftf@fCf<-¼> [<ftf@fCf<-¼> ...]
- ‘ãffbfR [] “à,İ□€-Ú,İ□É—ª%oÄ”\
- <flfvfVf#f“> ,İfRf}f“fhf%ofCf“flfvfVf#f“,đ•\,·
- <ftf@fCf<-¼> ,İfRf“fpfCf<,·éƒ□[fXfR□[fhftf@fCf<,đ•\,·

<ª’É,ÉŽg,İ,ê,éƒRf“fpfCf%oflfvfVf#f“,đ^è—•\Ž!,·,é,É,İ□CfRf}f“fhf%ofCf“,Ä
BCC32□İflfvfVf#f“,âftf@fCf<-¼,İŽw’è,µ,È,č□,Æ“ü—İ,µ,Ä,©,ç□kEnter□,đ%oÿ,µ,Û,·□B,±
,İfŠfXfg,É,İffftfHf<fg,ÄŽg—p%oÄ”\,É,È,Ä,Ä,č,éflfvfVf#f“,ª•\Ž!,ª,è,Û,·□B

fRf}f“fhf%ofCf“fRf“fpfCf%o-¼□CflfvfVf#f“□Cftf@fCf<-¼,İ,» ,¼,è 1
,Ä^É□ã,İfXfy□[fX,Ä<æ□Ø,ç,È,~,è,İ,È,è,Û,¹,ñ□B,Û,½□CŠeflfvfVf#f“,İ’O,É,İfnfCftf“□i-□,©fXf
%ofbfVf...□i/□,đ•t,~,Û,·□B,½,Æ,İ,İ□CŽÿ,İ,æ,ª,ÉŽw’è,µ,Û,·□B

BCC32 -Ic:\code\hfiles

fRf}f“fhf%ofCf“,ÉflfvfVf#f“,âftf@fCf<-¼,đ“ü—İ,·,é,Æ□CŠÄ<«□Ý’èftf@fCf<’t,İ□Ý’è’l,ª□C“ü—
İ,µ,½’l,É•İ□X,ª,è,Û,·□B

BCC32 ,đŽg,ª,Æ□Cftf@fCf<,đ TLINK□i.OBJ ftf@fCf<□,Û,½,İ TASM32□iTASM32
,ªfCf“fXfg□[f<,ª,è,Ä,č,è,İ .ASM ftf@fCf<□,É’—,é,±,Æ,ª,Ä,« ,Û,·□B

ffftfHf<fg□Ý’è

BCC32.EXE ,É,İffftfHf<fg,Ä—LÆø,ÉflfvfVf#f“,ª, ,è,Û,·□BffftfHf<fg,İflfvfVf#f“,đ-
³Æø,É,·,é□C,Û,½,İŠÄ<«□Ý’èftf@fCf<“à,İflfvfVf#f“,đ-
³Æø,É,·,é,É,İ□CflfvfVf#f“,İÆä,è,Éf}fCfifX•,□†□i-□,đ•t,~,Û,·□B

Šg’£Žq,İ,È,čftf@fCf<,Æ .CPP Šg’£Žq,đŽ□,Äftf@fCf<,İ C++
ftf@fCf<,Æ,µ,ÄfRf“fpfCf<,ª,è,Û,·□B.C Šg’£Žq,đŽ□,Äftf@fCf<,â□C.CPP□C.OBJ□C.LIB□C.ASM
^ÉŠO,İŠg’£Žq,đŽ□,Äftf@fCf<,İ C ftf@fCf<,Æ,µ,ÄfRf“fpfCf<,ª,è,Û,·□B

fRf“fpfCf%o,İŽÀ□sCÉ`Ž@ftf@fCf<,đ“~,¶-¼’O,İf,fWf...
□[f<’è< ftf@fCf<,đŽg,Ä,ÄfŠf“fN,µ,Û,·□B•É,İ-¼’O,İf,fWf...
□[f<’è< ftf@fCf<,đŽg,Ä,ÄfŠf“fN,·,é,É,İ□CTLINK ,Û,½,İ TLINK32 ,đŽg—p,µ,È,~,è,İ,È,è,Û,¹,ñ□B

ŠĀ«□Ý'èftf@fCf<,iŽg,č•û

ŠÖ~A□€-Ú

“Á'è,lfifvfVf#f” ,đ%½“x,àŽg,ᄡê#□C%½“x,àfRf}f“fhf%ofCf” ,É“ü—
Í,·,é,©,í,è,ÉŠĀ«□Ý'èftf@fCf<,ÉŽw'è,Ā,«,Ü,·□BŠĀ«□Ý'èftf@fCf<,Í•W□€,lfefLfXfgftf@fCf<,Ā, ,è
□C1 ,Ā,Ü,½,Í•j□” ,lfRf}f“fhf%ofCf” ,đŠÜ,Ý,Ü,·□BŠeflfvfVf#f” ,lfXfy□[fX,Ü,½,Í
%ü□s,Āæ□Ø,ç,ê,é•K—v,ª, ,è,Ü,·□B

fRf“fpcfCf<fRf}f“fh,đŽĀ□s,·,é,Æ□CBCC32.EXE ,Í BCC32.CFG ,Æ,č
,ᄡŠĀ«□Ý'èftf@fCf<,đĈÿ□ö,µ,Ü,·□BfRf“fpcfCf%
,Í,Ü,·□Cft□[fU□[,ᄡfRf“fpcfCf<fRf}f“fh,đŽĀ□s,µ,½fffBfĈEfNfgfŠ,Ā .CFG
ftf@fCf<,đ'T,µ□CŽÿ,ÉfRf“fpcfCf% ,ªŠi”[,ª,ê,Ā,č,éfffBfĈEfNfgfŠ,Ā'T,µ,Ü,·□B

ffftfHf<fg,ì .CFG ftf@fCf<,đŽg,ᄡÈŠO,É□C•j□” ,iŠĀ«□Ý'èftf@fCf<,đ□□¬,µ,ĀŽg,ᄡ,±
,Æ,à,Ā,«,Ü,·□BŠĀ«□Ý'èftf@fCf<,đŽg,ᄡ,É,Í□CfRf“fpcfCf%flfvfVf#f” ,đ“z'u,·,éê□Š,ĀŽÿ,ì□
•¶,đŽg,č,Ü,·□B

+ [<fpx>] <ftf@fCf<-¼>

,½,Æ,¡,î□CMYCONFIG.CFG ,Æ,č,ᄡŠĀ«□Ý'èftf@fCf<,đŽg,ᄡ,É,Í□CŽÿ,ì,æ,ᄡ,ÉfRf}f“fhf%ofCf” ,đ“ü
—Í,µ,Ü,·□B

BCC32 +C:\MYPROJ\MYCONFIG.CFG mycode.cpp

fRf}f“fhf%ofCf” ,ĀflfvfVf#f” ,đ“ü—Í,·,é,Æ□CŠĀ«□Ý'èftf@fCf<,ì□Ý'è,ªf□[fo□[f%ofCfh,ª,ê,Ü,·□B

fRf"fpfCf%ofCEfXfjf"fxftf@fCf<,iŽg,č•û

ŠÖ~A□€-Ú

fCEfXfjf"fxftf@fCf<,É,İfRf"fpfCf%ofİfvfVf+f",,æ,Ñftf@fCf<-¼,i-¼•û,đ 1
,Å,İftf@fCf<,ÉŠi"[,Å,«,Û,·□iSÅ««□Y'èftf@fCf<,İfRf"fpfCf%ofİfvfVf+f",İ,Ý□□BfCEfXfj
f"fxftf@fCf<,İ•W□€,İfefLfxfgftf@fCf<,Å,,è□C1 ,Å,Û,½,İ•i□",İfRf}f"fhf
%ofCf"İfvfVf+f",Æftf@fCf<-¼,ªŠÛ,Û,è,Û,·□Bftf@fCf<"à,İSe□€-Û,İfXfy□[fX,Û,½,İ
%ü□s,Å<æ□Ø,ç,è,Û,·□BfCEfXfjf"fxftf@fCf<,đŽg,ª,Æ□CfRf"fpfCf<fRf}f"fh,đŠÈ—ª%»»,Å,«,é,±
,Æ,É%»Å,İ,Å□CfİfyfCE□[fefBf"fofvfXfef€,Å,İ"F,β,ç,è,È,ç'·,çfRf}f"fhf%ofCf",ªŽg,İ,é,æ,ª
,É,È,è,Û,·□B

fCEfXfjf"fxftf@fCf<,đ 1 ,Å,¾,~Žg—p,·,é□è□‡,İ□\•¶,İ□CŽÿ,İ,Æ,,è,Å,·□B

BCC32 @ [<fpfX>] <fCEfXfjf"fxftf@fCf<-¼>

•i□",İfCEfXfjf"fxftf@fCf<,đŽg—p,·,é□è□‡,İ□\•¶,İ□CŽÿ,İ,Æ,,è,Å,·□B

BCC32 @ [<fpfX>] <fCEfXfjf"fxftf@fCf<-¼> @ [<fpfX>] <'¼,İfCEfXfjf"fxftf@fCf<-¼>

Borland C++Builder ,É•t'® ,İfCEfXfjf"fxftf@fCf<,É,İ .RSP ,İŠg'£Žq,ª•t,ç,Ä,ç,Û,·□BfRf}f"fhf
%ofCf",ÅİfvfVf+f",đ"ü—İ,·,é,Æ□CfCEfXfjf"fxftf@fCf<"à,İfvfVf+f",Û,½,İftf@fCf<-¼,ªİ□[fo□[f
%ofCfh,ª,è,Û,·□B

fRf“fpfCf%oflfvfVf#f“,ì—Dæ#^Ê<K'¥

ŠÖ~A€-Ú

- fRf}f“fhf%ofCf“fRf“fpfCf%o,íCŽÿ,ì<K'¥,ð“K—p,µ,È,^a,çflfvfVf#f“,ð¶¶,©,ç%oE,É•]‰‰,µ,Ü,·B
““,¶lfvfVf#f“,ð¶d•j,µ,Ä“ü—í,µ,½¶ê#C-D¶C-U¶C-I¶C,Ü,½,í -L
^ÈŠO,lfvfVf#f“,Ä,íC^ê“Ô‰E¶i¶ÅĚãj,lfvfVf#f“,^a,»„ê^È'O,ì,Ç,lfvfVf#f“,æ,è,à—
Dæ,³,ê,Ü,·i-D¶C-U¶C-I¶C,“,æ,Ñ -L ,í—Y¶í,³,ê,Ü,·jB
- fRf}f“fhf%ofCf“,ÉflfvfVf#f“,ð“ü—í,·,é,ÆCSĚ«¶Y'èftf@fCf<,ÆfĚfXf|
f“fXftf@fCf<,^a,»„lfvfVf#f“,É•íX,³,ê,Ü,·B

CPP32 F C fRf"fpfCf%ofvfŠfvf fZfbfT

ŠÖ~A€-Ú

```
CPP32.EXE , íC#include ftf@fCf<,â #define f}fNf,ª"WŠJ,³,ê,½CC fvf fOf%of€,ìi1
ftf@fCf<"à,ìjŠfXfg,ðiï-,µ,Û,·B'Êi,ìRf"fpfCf<,Á,ìvfŠfvf fZfbfT,ðŽg,κ•K-v,Í, ,è,Û,¹,ñ,ªC
iï-,³,ê,½fŠfXfgftf@fCf<,ªffofbfO,Á-ð,É-š,Áêiª, ,è,Û,·B
```

```
f}fNf,âfCf"fNf<[fhftf@fCf<,ì"à",ÁfGf%o[ ,ª"-
µ,½êiC,»,ìfCf"fNf<[fhftf@fCf<,âf}fNf"WŠJ,ìC<%oÊ,ðŽQAE,Á,«,è,ìCfGf%o[ ,ì"à-
e,É,Á,ç,Á,æ,è'½,,ìi•ñ,ð'¾,é,±,Æ,ª,Á,«,Û,·Bf}f<f'fpfXfRf"fpfCf%o,ì'½,,Á,ìC"Æ-
š,ìpfX,Á,±,ìi<Æ,ðs,Á,Á,,èC,»,ìpfX,ìC<%oÊ,ð'², x,é,±,Æ,ª,Á,«,Û,·BC++Builder
,ì"iªP^èpfXfRf"fpfCf%o,ðŽg,κ,ì,ÁC'¾,ìRf"fpfCf%o,ì'æ 1 fpfX,ì<@"\,ð'¾,é,½,ß,É CPP32
,ðŽg,ç,Û,·B
```

```
ŠefvfŠfvf fZfbfT,É,ìC,»,è,¼,è,ìo-í,ðsCEä,·éRf}f"fhf%ofCf"flfvVfª", ,è,Û,·B,±
,è,çflfvVfª",ìšfXfg,ðŽQAE,·,é,É,ìCfRf}f"fhf%ofCf",Á CPP32 ,Æ"ü-í,µ,Û,·B
```

```
CPP32 ,ªftf@fCf<,ð^-,·,é,½,Ñ,ÉCf\ìXftf@fCf<,Æ"- ,¼'O,ÁŠg'£Žq .ì
,ìftf@fCf<,ªfjCEf"fgffBfCEfNfgfŠi,Û,½,ì -n flfvVfª",ÁŽw'è,³,è,½o-
ìffBfCEfNfgfŠj,É',«ž,Û,è,Û,·B
```

```
,±,ìo-ìftf@fCf<,ìCf\
ì[Xftf@fCf<,Æ,·, x,Á,ìfCf"fNf<[fhftf@fCf<,ìŠe,ðŠÛ,pfefLfXfgftf@fCf<,Á,·BvfŠfvf fZfbfT Ž
w-ß,ìs,ì,·, x,Áœ<Ž,³,èCfRf"fpfCf<,©,çœŠO,³,è,éðCEfefLfXfgs,àœ<Ž,³,è,Á,ç
,Û,·BfRf}f"fhf
%ofCf"flfvVfª",Á"Á,ÉŽw'è,µ,È,çCEÀ,èCfefLfXfgs,ì'O,ÉC,»,ìfefLfXfg,ªŠi"[ ,³,è,Á,ç,½f\
ì[Xftf@fCf<,Û,½,ìfCf"fNf<[fhftf@fCf<,ìftf@fCf<-
¾,Æs"Ôt,ª•t,«,Û,·BfefLfXfgs,ì't,Á,ìC,·, x,Á,ìf}fNf,ª"WŠJi,Ý,ìfefLfXfg,É'uŠ,³,è,Á,ç
,Û,·B
```

- ▶ CPP32 ,ìC<%oÊ,ìo-í,ìCŠef\ìXs,Éftf@fCf<-¼,Æs"Ôt,ª•t%oÁ,³,è,Á,ç
,é,½,ßCfRf"fpfCf<,Á,«,Û,¹,ñB,µ,©,µC-P- flfvVfª",ðŽg,κ
,Æs"Ôt,ðŽ,½,É,çftf@fCf<,ðiï-,Á,«C,»,ìftf@fCf<,ðfRf"fpfCf%o,É"n,·,±
,Æ,ª,Á,«,Û,·BfRf"fpfCf%o,Á,ìC-P flfvVfª",í C++ fRf"fpfCf<,ð<s,·,é,ì,ÉŽg-p,µ,Û,·B

CPP32 ,lžg,č•û

l•l

CPP32 [flfvfVf#f“] ftf@fCf<□i•i□”%oÂ□j

fRf}f“fhf%ofCf“flfvfVf#f“

CPP32 ,ÅŽg,xfifvfvf#f“ ,í^È%o,ì,Æ,“,è,Å,•□B

flfvfVf#f“ %ođ□à

-Ax	CE¾4CEèŠg'f,đŽw'è,•,é
-C	flfXfg, ³ ,è,½fRf□f“fg,đ<-%oÂ,•,é
-D-¼'O	f}fNf□,đ'è<'•,•,é
-gnnn	N “x-Ú,ìCEx□□CEã,É'âŽ~,•,é
-innn	Ž•ÊŽq,ì□Å'â,ì'•, ³ đ N ,Æ,•,é
-IfpfX	fCf“fNf<□lfhftf@fCf<,ìfffBfCEfNfgfŠ
-jnnn	N “x-Ú,ìfGf%o□[CEã,É'âŽ~,•,é
-mm	f□f,fŠf,fff<□iffftfHf<fg,í s□j□i16 frfbfg,ì,Ý□j
-nfpfX	□o—íftf@fCf<,ìfffBfCEfNfgfŠ
-oftf@fCf<-¼	□o—íftf@fCf<-¼
-p	Pascal ,ìCEÄ,Ñ□o,μ<K-ñ
-P	f□[fX□s□i•ñ,đŠÜ,þ□iffftfHf<fg,í—LCEø□j
-sk	fGf%o□[,“□l,μ,Ä,à□o—íftf@fCf<,đ□í□œ,μ,È,č
-sd	f}fNf□,ì'è<'•l/'è<'%ođ□œ•l,đ□o—í,•,é
-U-¼'O	f}fNf□,ì'è<'•,đ- ³ CEø,É,•,é
-w	,•,×,Ä,ìCEx□□,đ—LCEø,É,•,é
-w-xxx	CEx□□ xxx ,đ- ³ CEø,É,•,é
-wxxx	CEx□□ xxx ,đ—LCEø,É,•,é

CPP32

```
-P flfvfVf#f" ,đŽg,Æ,AECCŠe□s,ì"ª,Éf□[fXftf@fCf<-¼,Æ□s"Ô□†,ª•t,«,Ü,·□B-P- flfvfVf#f" ,đŽg,Æ,AE□CCPP32 ,đf}fNf□fvfŠfvf□fZfbfT,Æ,μ,ÁŽg,!,é,æ,Æ,É,È,è,Ü,·□B,±,ì□ê□#□CCE<%oÉ,ì .lftf@fCf<,í□CBCC32 ,ÁfRf"fpfCf<,Á,«,Ü,·□iBCC32 ,ì -PflfvfVf#f" ,đŽg,Á,ÄffftfHf<fg,íftf@fCf<Šg'£Žq,đ□Y'è,Á,«,é,±,Æ,É'□^Ó,μ,Ä,,¾,¾,¢□j□BŽY,ífvf□fOf%of€,Á,í□C,Ü,· -P□CŽY,É -P- ,đ'í'đ,μ,Ä□CCPP32 ,ª,Ç,ì,æ,Æ,Éftf@fCf<,đ□^—□□ifvfŠfvf□fZfX□j,·,é,©,đŽ!,μ,Ä,¢,Ü,·□B
```

HELLOFB.C

```
#define NAME "Frank Borland"
#define BEGIN {
#define END    }

main()
BEGIN
    printf("%s\n", NAME);
END
```

CPP32 fRf}f"fhf%ofCf": CPP HELLOFB.C

o—í:

```
HELLOFB.c 1:
HELLOFB.c 2:
HELLOFB.c 3:
HELLOFB.c 4:
HELLOFB.c 5: main()
HELLOFB.c 6: {
HELLOFB.c 7:     printf("%s\n", "Frank Borland");
HELLOFB.c 8: }
```

CPP32 fRf}f"fhf%ofCf": CPP -P- HELLOFB.C

o—í:

```
main()
{
    printf("%s\n", "Frank Borland");
}
```

CPP32.EXE ,Æ MIDL ,ìŽg,ç•û

MIDL (Microsoft Interface Definition Language) ,íC RPC fRf“fpfCf%o,Å,·B Borland C++ ,ìfvfŠfvf[]fZfbfT,Å MIDL ,ðŽg,æ,½,ß,É,Í C%o<L,ì MIDL fRf}f“fh,ðŽg,æ•K—v,^a, ,è,Ü,·B

```
MIDL -cpp_cmd {CPP32} -cpp_opt "-P- -oCON {CPP32 options}" {MIDL options}
  { .idl/.acf }
```

flfvfVf#f“	%oð□à
-cpp_cmd {CPP32}	.IDL ftf@fCf<,Ü,½,Í .ACF ftf@fCf<,ð□^— □,·,é,Æ,«,É,Ç,ìfvfŠfvf[]fZfbfT,ðŽg,æ,©,ð MIDL ,ÉŽwŽ!,µ,Ü,·BMIDL ,íC,»,ìfvfŠfvf[]fZfbfT,ðÆÄ,Ñ□o,µ,Ä□Cf\ □[fXftf@fCf<“à,ìf}fNf□,ð“WŠJ,µ,Ü,·
-cpp_opt "{options}"	fvfŠfvf[]fZfbfT,ìRf}f“fhf%ofCf“flfvfVf#f“,ðŽw’è,µ,Ü,·B-P- flfvfVf#f“,ðŽg,æ,Æ□CfvfŠfvf[]fZfXÆà,ì□o— Í,ì□s,©,ç□s”Ô□t,Æftf@fCf<-¼,ì□î•ñ, ^a Žæ,è□œ,©,è,Ü,·B-oCON ,íCfvfŠfvf[]fZfXÆà,ì□o—Í,ð□Cftf@fCf<,Å,Í,È,•W□€□o—Í,É—,é,± ,Æ,ðŽ!,µ,Ü,·BfvfŠfvf[]fZfbfT,ìC□□o,µ,ÆC□»Ý□^— □’t,ìftf@fCf<,í’—,ç,è,Ü, ¹ ,ñ□BfvfŠfvf[]fZfbfT, ^a □^—□,·,é .CFG ftf@fCf<,É -oCON ,ðŠÜ,ß,é,Æ□CCE□□o,µ,ð’—,é,±,Æ, ^a ,Å,«,Ü,·
{CPP32 options}	flfvfVf#f“,ð CPP32 ,É“n,µ,Ü,·
{MIDL options}	“C^Ó,ì MIDL fRf}f“fhf%ofCf“flfvfVf#f“,Å,·
{.idl/.acf file}	MIDL , ^a □^—□,·,éf□[fXftf@fCf<,Å,·

CPP32 ,Æ UUID

□ê□‡,É,æ,Á,Ä,Í□CCPP32 ,^a—LÆø,È UUID ,ðŽó,~“ü,ê,È,ç,±,Æ,^a, ,è,Ü,·□B,½,Æ,|,Î□C—LÆø,È
UUID •¶,ÍŽŸ,ì,Æ,¨,è,Å,·□B

```
uuid(5630EAA0-CA48-1067-B320-00DD010662DB)
```

,½,¾,μ□CCPP32 ,^a 5630EAA0 ,ðÆ©,Â,¯,é,Æ□C,±,ê,^a•,“@□¬□”“_□”,Æ,μ,Ä•^a—p,³,ê,Ü,·,ª□C-
³Æø,È•,“@□¬□”“_□”,È,ì,ÅfvfŠfvf□fZfbfT,ªfGf%o□[,ð^ø,«<N,±,μ,Ü,·□B,±,ì-â'è,ð
%oñ”ð,·,é,É,Í□CUUID ,ð^ø—p•,,Å^í,Ÿ□CMIDL flfvfVf‡f“ -ms_ext ,ðŽg,ç,Ü,·□BUUID
•¶,ÍŽŸ,ì,æ,α,É,È,è,Ü,·□B

```
uuid("5630EAA0-CA48-1067-B320-00DD010662DB")
```

,Ü,½□CMIDL fRf}f“fhf%ofCf“ ,ÍŽŸ,ì,æ,α,É,È,è,Ü,·□B

```
MIDL -ms_ext -cpp_cmd {CPP32} -cpp_opt "-P- -oCON {CPP32 options}" {MIDL  
options} {.idl/.acf file}
```

GREP

ŠÖ~A€-Ú

GREP iGlobal Regular Expression Print j, íC“ , ¶-¼‘O, ì UNIX ft [fefBfŠfefB, ©, ç”h ¶, μ, ½<—
Í, ÈfefLfxfgÆÿðövf¶fOf%of€, Å, ·BGREP , íC1 , Å, Û, ½, í·i” , ìftf@fCf<, à, μ, , í·W¶€“ü—
ÍfxfgfŠ [f€, ÅfefLfxfgf¶f^ [f“ , ðÆÿðö, μ, Û, ·¶B

GREP , ðŽg, Á, ½—á, ðŽÿ, ÉŽì, μ, Û, ·¶BffÆf“fgffBfÆfNfgfŠ, ì, Ç, ìftf@fCf<, É·¶Žš—
ñ¶uBob¶v, ¢, , é, ì, © ‘m, è, ½, ¢ ¶ê¶¶CŽÿ, ì, æ, ¢, É“ü—í, μ, Û, ·¶B

```
grep Bob *.txt
```

GREP , íC·¶Žš—ñ¶uBob¶v, ðŠÛ, ¶ftf@fCf<, ¢, , é, íC, » , ì, » , é, ¼, é, ìs, ì^ê— , ð·\Žì, μ, Û, ·BGREP
, íCffftfHf<fg, Å, í·¶Žš, Æ¶—·¶Žš, ð<æ·É, , , é, ì, ÅC·¶Žš—
ñ¶ubob¶v, Æ¶uBob¶v, ì^ê‘v, μ, Û, ¹, ñ¶B

GREP , É, Å, «, é, ì, íC1 , Å, ìÆÁ‘è, μ, ½·¶Žš—ñ, ìÆÿðö, ¾, -, Á, í, , è, Û, ¹, ñ¶BGREP
ŠÖ~A, ìfgfsfbfN, Å, ì“Á‘è, ì¶f^ [f“ , É^ê‘v, , , é·¶Žš—ñ, ðÆÿðö, , , é·ù-@, É, Å, ¢, Ä¶à-¾, μ, Ä, ¢, Û, ·¶B

GREP ,lfrf}f“fhf%ofCf“ ,l\•q

[ŠÖ~A□€-Ú](#)

GREP ,lŠî-{"l,ÈfRf}f“fhf%ofCf“ ,l\•q,ÍŽŸ,ì,Æ,“,è,À,•□B

```
grep [- flfvfVf+f“ ] Ćÿ□đ•qŽš—ñ [ ftf@fCf< (•;□”%oÂ) ... ]
```

flfvfVf+f“	%ođ□à
flfvfVf+f“	fnfCftf“□i-□j,ìĆă,É±, 1 •qŽš^È□ă,ì•qŽš,©,ç,È,è□CGREP ,l“ @□i,đ•Ī□X,μ,Û,•
Ćÿ□đ•qŽš—ñ	Ćÿ□đ,•,éftf^□[f“ ,đŽw’è,μ,Û,•
ftf@fCf<	Ćÿ□đ,•,éftf@fCf<,đŽw’è,μ,Û,•□jftf@fCf<,đŽw’è,μ,È,ç□ê□#□CGREP ,l•W□€“ü— Í,đĆÿ□đ,μ,Û,•□B,±,ì,½,β□CfpfCfv,âfŠf_fCfĆfNfVf+f“ ,đ—~—p,•,é,± ,Æ,ª,À,«,Û,•□j

GREP ? ,Æ,ç,xfRf}f“fh,đŽg,æ,Æ□CGREP ,lflfvfVf+f“□C“ÁŽê•qŽš□C,“,æ,ÑffftfHf<fg,đŽl,•fwf<fv
%oæ-Ê,ª•\Žl,ª,ê,Û,•□B

GREP ,©,ç,ì□o—l,đfŠf_fCfĆfNfg,•,é

GREP ,lĆ<%oÊ,ª 1 %oæ-Ê,É,“,ª,Û,ç,È,ç□ê□#□C□o—l,đftf@fCf<,ÉfŠf_fCfĆfNfg,•,é,±
,Æ,ª,À,«,Û,•□B,½,Æ,!,l□C

```
GREP "Bob" *.txt > temp.txt
```

,Æ,ç,xfRf}f“fh,đŽg,æ,Æ□CfjfĆf“fgfffBfĆfNfgfŠ,É, ,éŠg’£Žq,ª TXT
,l,•,x,Ā,łftf@fCf<,đĆÿ□đ,μ□C,»,lĆ<%oÊ,đ TEMP.TXT□i,±,l-¼’O,Íft□[fU□[,ªŽ ©—
R,ÉŽw’è,À,«,Û,•□j,É□’,«□ž,β,Û,•□B“K“—,Èf□□[fhfvf□fZfbfT,đŽg,Á,Ā
TEMP.TXT□iĆÿ□đĆ<%oÊ□j,đĆ ©,Ā,,¾,ª,ç□B

GREP ,lfrf}f“fhf%ofCf“flfvfVf#f“

ŠÖ~A[€-Ú

fRf}f“fhf%ofCf“ ,Å GREP ft[feBfŠfefB,ÉflfvfVf#f“ ,ð“n, ,É,ÍCfnfCftf“i-j,É±, 1
 •ŦŽš^Èä,ì•ŦŽš,ðžw'è,μ,Û,·BCEÅX,ì•ŦŽš,ÍCflf“ ,Û,½,Ílft,·,é,±,Æ,ª,Å,« ,éXfCfbf` ,Å,·Bfvf
 %ofX<L[+i+qj,ð•ŦŽš,ìCEä,É•t,·,é,ÆC,» ,lflfvfVf#f“ ,áflf“ ,É,È,è,Û,·BfnfCftf“i-
 qj,ð•ŦŽš,ìCEä,É•t,·,é,ÆC,» ,lflfvfVf#f“ ,áflf,É,È,è,Û,·Bfvf
 %ofX<L[+i,Í“C^Óžw'è,Å,·B,½,Æ,ì,ÍC-r ,ÍC-r+
 ,Æ“ ,Ŧ,Å,·B•i” ,lflfvfVf#f“ ,ð•ÈX,Éžw'è,·,éqi,½,Æ,ì,Í-i -d -lqj,±
 ,Æ,àCflfvfVf#f“ ,ð'g,Ÿq,ì,¹,éqi,½,Æ,ì,ÍC-ildC-il -d,É,Çqj,±,Æ,à,Å,« ,Û,·B
 GREP ,lflfvfVf#f“ •ŦŽš,Æ,» ,ì•ŦŽš,ì^è—— ,ðžì,μ,Û,·B

flfvfVf#f“	%oð[à
-c	%oñ[,ì,ŸB^è'v,μ,½qs,ì[,¾,·,ð•Žì,μ,Û,·B[,È, ,Æ,à 1 qs,ì^è'v,·,éqs,ª ,éftf@fCf<,ì,» ,è,¼,è,É,Å,ç ,ÅCftf@fCf<-¼,Æ^è'v,μ,½qs[,ð•\ Žì,μ,Û,·B^è'v,μ,½qs,» ,ì,à,ì,ì•Žì,μ,Û,¹,ñB,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·
-d	fTufffBfCfNfgfŠ,àCEŸ[ðBfRf}f“fhf%ofCf“ ,Åžw'è,³,è,½ftf@fCf<,ì,» ,è,¼,è,É,Å,ç ,ÅCžw'è,³,è,½ffBfCfNfgfŠ,ÆC,» ,lffBfCfNfgfŠ,ì,·,x,Å,lTufffBfCfNfgfŠ,ÅCftf @fCf<žw'è,Æ^è'v,·,é,·,x,Å,lftf@fCf<,ðCEŸ[ð,μ,Û,·BfpfX,È,μ,Áftf@fCf<,ðžw'è,·,é,Æ C,» ,lftf@fCf<,lffCf“fgffBfCfNfgfŠ,É, ,é,à,ì,Æ%¼'è,μ,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·
-i	'á•ŦŽš[~•ŦŽš,ð<æ•È,μ,È,çB'á•ŦŽš,Æ[~•ŦŽš,ì[,ð-³ž<,μ,Û,·B,± ,lflfvfVf#f“ ,áflf“ ,É,È,Å,Å,ç,é,ÆCa ,© ,ç z ,Û,Å,ì•ŦŽš,ì,·,x,Å,ªCA ,© ,ç Z ,Û,Å,ì'í %ož,·,é•ŦŽš,Æ“^è,ÆCE© ,È,³,è,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·
-l	ftf@fCf<-¼,ì,Ÿ^è—— •ŽìB^è'v,·,éqs,ª ,éftf@fCf<,ì-¼'0,¾,·,ð•\ Žì,μ,Û,·B^è'v,·,é•ŦŽš,ªCE© ,Å,© ,é,ÆCftf@fCf<-¼,ð•\ Žì,μC,½,¾,ç,ÉžŸ,lftf@fCf<,ì^—[,É^Ú,è,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·B
-n	qs“Ó[+B^è'v,μ,½qs,ð•\žì,·,é[Ú,ÉCqs,ì'0,Éqs“Ó[+ ,ð•\žì,μ,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·B
-o	UNIX [o—lftfH[{}f]fbfgB^è'v,·,éqs,ì[o—lftfH[{}f]fbfg,ð•iX,μ,ÅCUNIX fXf^fCf<,lfrf}f“fhf%ofCf“fpfCfV^—[,ðftf[[]fg,μ,à,·,- ,μ,Û,·BŠeqs,ì[æ“ª ,ÉC^è'v,·,éqs,ðšÛ,þftf@fCf<,lftf@fCf<-¼,ª[o—í,³,è,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflft,É,È,Å,Å,ç,Û,·B
-r	[³<K•\CE»CEŸ[ðBCEŸ[ð•ŦŽš—ñ,É,æ,Å,Å'è<,³,è,éfefLXfg,ðCfŠfef%of<•ŦŽš— ñ,Å,ì,É, [³<K•\CE» ,Æ,μ,Å^μ,ç,Û,·B,± ,lflfvfVf#f“ ,ÍCffftfHf<fg,Áflf“ ,É,È,Å,Å,ç ,Û,·B [³<K•\CE» ,Æ,ìC1 ,Å,Û,½,ì•i” ,ì•ŦŽš,ì 1 %oñ^Èä,ìCEJ,è•Ò,μ,ÅC^ø— p• , ,Å^í,p,±,Æ,à,Å,« ,Û,·B%o<L,ì<L[+ ,ìC“Á•É,È^Ó-i,ðž[,ç,Û,·B ^ [s“ª \$ [s-- . “C^Ó,ì•ŦŽš \ žŸ,ì•ŦŽš,ðfŠfef%of<,Æ,μ,Å^μ,ª * 0 %oñ^Èä,ìCEJ,è•Ò,μ + 1 %oñ^Èä,ìCEJ,è•Ò,μ [aeiou0-9] a[Ce[Ci[Co[Cu[C,Û,½,í 0[9 ,Æ^è'v [^aeiou0-9] a[Ce[Ci[Ci[Co[Cu[C, ,æ,Ñ 0[9 ^ÈŠO,Æ^è'v
-u	flfvfVf#f“ [X[V[BfRf}f“fhf%ofCf“ ,lflfvfVf#f“ ,ðCGREP.COM ,lffftfHf<fglflfvfVf#f“ ,É'Ç %oÅ,μ,Û,·B,± ,lflfvfVf#f“ ,ðžg,ª ,Æ[CffftfHf<fg,lflfvfVf#f“ [Ÿ'è,ðjffXf^f}fCfY,Å,« ,Û,·B GREP.COM ,lffftfHf<fg [Ÿ'è,ð'²,x,é,É,ìCGREP ? ,Æ“ü—í,μ,Û,·B“ü—í,·,é,Æfwf<fv%oæ- È,lflfvfVf#f“ ,É[CffftfHf<fg [Ÿ'è,É%ož,Ŧ,Å + <L[+ ,Û,½,í - <L[+ ,ª•t,« ,Û,·B

- v •s^ê'v□B^ê'v,μ,È,ç□s,¾, -, ð•\Ž!,μ,Û, ·□BCEÿ□ö•¶Žš—
 ñ,ðŠÛ,Û,È,ç□s,²□C^ê'v,μ,È,ç□s,Æ,Ý,È,³,ê,Û, ·□B,±
 ,lflfvfVf#f“, í□CffftfHf<fg,Åflft,É,È,Á,Ä,ç,Û, ·□B
 - w f□□[fhCEÿ□ö□B³<K•\CE»,É^ê'v, ·,éfefLfXfg,í□C,»,ì'¼'O,“,æ,Ñ'¼CEä,ì•¶Žš,² 1
 'PCEê,ì^ê” ,Á,È,ç□ê□#,ÉCEÀ,Á,Ä^ê'v, ·,é,Æ,Ý,È,³,ê,Û, ·□BffftfHf<fg,ì'PCEê•¶ŽšfZfbfg,
 É,í□CA ,©,ç Z ,Û,Á,Æ□C0 ,©,ç 9 ,Û,Á,Æ□C%□ü□L□+□i_□j,²ŠÛ,Û,ê,Û, ·□B,±
 ,lflfvfVf#f“, í□CffftfHf<fg,Åflft,É,È,Á,Ä,ç,Û, ·□B,±,lflfvfVf#f“,ì,à,π 1
 ,Á,ìCE`Ž® ,Á,í□C'PCEê•¶Žš,ì□W□#,ðŽw'è, ·,é,±,Æ,²,Á,«,Û, ·□B,»,ìCE`Ž®,í□C-
 w[fZfbfg] ,Á□C□ufZfbfg□v,í—LCEø,È□³<K•\CE»,Á, ·□B
 fAf<ftf@fxfbfg•¶Žš,ÅfZfbfg,ð'è< ,μ,½□ê□#□CfZfbfg“à,ì•¶Žš,ì,»,ê,¼,ê,É,Á,ç
 ,Ä□C'â•¶Žš,Æ□¬•¶Žš,ì—¼•ú,ðŠÛ,þ,à,ì,Æ,μ,Á□W□#,²Ž©“®“ì,É'è< ,³,ê,Û, ·□B,±
 ,ê,í□C“ü—í,μ,½•¶Žš,É-³ŠÖCEW,Á□CCEÿ□ö,²'â•¶Žš□¬•¶Žš,ð<æ•È, ·,é,©,Ç,π
 ,©,É,à-³ŠÖCEW,Á, ·□B-w flfvfVf#f“,Æ -u flfvfVf#f“,ð'g,Ý□#,í,¹,ÄŽg,π
 ,Æ□C'PCEê•¶Žš,ì□V,μ,ç□W□#,ðffftfHf<fg□W□#,Æ,μ,Á•Û'¶,Á,«,Û, ·□B
 - z □Ú□×•\Ž!□BCEÿ□ö,μ,½ftf@fCf<,ì, ·,x,Ä,lftf@fCf<-¼,ð•\
 Ž!,μ,Û, ·□B^ê'v, ·,é□s,ì'O,É□s”Ô□+,ð•t, -, Û, ·□Bftf@fCf<,²,Æ,É^ê'v,μ,½□s□”,ð•\
 Ž!,μ,Û, ·□i□s□”,²ftf□,ì□ê□#,Á,à□□B,±,lflfvfVf#f“, í□CffftfHf<fg,Åflft,É,È,Á,Ä,ç,Û, ·□B
 - ? GREP ,lflfvfVf#f“□C“ÁŽê•¶Žš□C,“,æ,ÑffftfHf<fg,ðŽ!,·fwf<fv%□æ-È,ð•\Ž!,μ,Û, ·□B
-

GREP ,l̂CEŸ[]õ•ŸŽš—ñ

ŠÖ~A[]€-Ú

CEŸ[]õ•ŸŽš—ñ,l̂l̂,[]CGREP ,aCEŸ[]õ, ,éfpf^[]lf“ ,ð`è<` ,μ,Ú,·[]BCEŸ[]õ•ŸŽš—ñ,í[]C[]³<K•\
 CE»,Ú,½,l̂fšfef%of<•ŸŽš—ñ,l̂,ç,¿,ç,©,Á,·[]B
 ▪ []³<K•\CE»,Á,í[]C“Á`è,l̂•ŸŽš,ª“ÁŽê,Ê^Ó-¿,ðŽ[],¿,Ú,·[]B,±,ê,ç,l̂•ŸŽš,í[]CCEŸ[]õ,ð[]\$CEä,·,é%
 %õŽŽŽq,Á,·[]B
 ▪ fšfef%of<•ŸŽš—ñ,Á,í[]C%õõŽŽŽq,ª, ,è,Ú,¹,ñ[]B•ŸŽš,l̂,»,ê,¼,ê,ª[]C,»,l̂•ŸŽš,»,l̂,à,l̂,Æ,μ,Á^
 μ,í,ê,Ú,·[]B

f^fu,âfXfy[]lfX,ðffšf~f^,Æ,μ,Á^μ,í,ê,É,ç,æ,μ,É,·,é,½,β,É,í[]CCEŸ[]õ•ŸŽš—ñ,ð^ø—
 p•,,Á^í,Y,Ú,·[]BCEŸ[]õ•ŸŽš—ñ,Æ[]AE[]#,³,è,éfeflfXfg,í[]C[]s,l̂<<ŠE,ð,Ú,½,®,±
 ,Æ,ª,Á,«,Ú,¹,ñ[]B,·,É,í,¿,[]Cfpf^[]lf“ ,É`è`v,·,éfeflfXfg,í[]C•K, , 1 []s,l̂t,ÉŽú,Ú,Á,Ä,ç
 ,È,·,ê,l̂,É,è,Ú,¹,ñ[]B

[]³<K•\CE»,í[]C“P^è,l̂•ŸŽš[]C,Ú,½,í`âfffbfR,Á<²,Ú,è,½•ŸŽš,l̂[]W[]#,l̂,ç,·,é,©,Á,·[]B[]³<K•\
 CE»,ð~ACE<,μ,½,à,l̂,à[]C[]³<K•\CE»,Á,·[]B

-r flfvfVf#f“[]iffffHfXfg,Áflf“[]j,ðŽg,μ,Æ[]CCEŸ[]õ•ŸŽš—ñ,í[]Cfšfef%of<•\CE»,Á,í,È,[]³<K•\
 CE»,Æ,μ,Á^μ,í,ê,Ú,·[]B%õõ<L,l̂•ŸŽš,É,í[]C“ÁŽê,Ê^Ó-¿,ª, ,è,Ú,·[]B

<L[]t	%õð[]à
^	•\CE»,l̂[]æ“ª,É, ,éfAfNfZf“fg<L[]t,í[]C[]s,l̂[]æ“ª,Æ^è`v,μ,Ú,·
\$	•\CE»,l̂--“õ,É, ,éfhf<L[]t,í[]C[]s--,Æ^è`v,μ,Ú,·
.	fšfšfjfh,í[]C“C^Ó,l̂•ŸŽš,Æ^è`v,μ,Ú,·
*	•ŸŽš—ñ,l̂CEä,l̂fAfXf^fšfXfN,í[]C,»,l̂•ŸŽš—ñ,Æ,»,l̂CEä,l̂“C^Ó,l̂CEÁ[]”[]i0 CEÁ,ðŠÜ,[]p,j,l̂“C^Ó,l̂•ŸŽš,Æ^è`v,μ,Ú,·[]B,½,Æ,l̂,í[]Cbo*, í[]Cb[]Cboo ,Æ^è`v,μ[]Cbo ,Æ,à^è`v,μ,Ú,·
+	•ŸŽš—ñ,l̂CEä,l̂fvf%ofX<L[]t,í[]C,»,l̂•ŸŽš—ñ,Æ,»,l̂CEä,l̂“C^Ó,l̂CEÁ[]”[]i0 CEÁ,ð[]æ,- []j,l̂“C^Ó,l̂•ŸŽš,Æ^è`v,μ,Ú,·[]B,½,Æ,l̂,í[]Cbo+ ,í[]Cbo ,â boo ,Æ,l̂^è`v,μ,Ú,·,ª[]Cb ,Æ,l̂^è`v,μ,Ú,¹,ñ
[]	‘âfffbfR,l̂t,l̂•ŸŽš,í[]C,»,l̂fffbfR“à,É, ,é•ŸŽš,l̂,ç,ê,© 1 ,Á,Æ^è`v,μ,Ú,·[]B,½,Æ,l̂,í[]C[bot] ,í[]Cb[]Co[]C,Ú,½,í t ,Æ^è`v,μ,Ú,·
[^]	‘âfffbfR,l̂t,l̂•ŸŽš—ñ,l̂[]æ“ª,É, ,éfAfNfZf“fg<L[]t,í[]CNOT ,ð^Ó- ¿,μ,Ú,·[]B,μ,½,ª,Á,Ä[]C[^bot] ,í[]Cb[]Co[]C,Ú,½,í t ^ÈŠO,l̂“C^Ó,l̂ 1 •ŸŽš,Æ^è`v,μ,Ú,·
[-]	‘âfffbfR,l̂t,l̂fnfCftf“ ,í[]C•ŸŽš,l̂“í^,ð•\,μ,Ú,·[]B,½,Æ,l̂,í[]C[b-o] ,í[]Cb ,©,ç o ,Ú,Á,l̂“C^Ó,l̂ 1 •ŸŽš,Æ^è`v,μ,Ú,·
\	f[]fCf~fhfj[]fh•ŸŽš,l̂O,É%õ~<L[]t,ª, ,é,Æ[]C,»,l̂•ŸŽš,l̂f[]fCf~fhfj[]fh,Á,í,È,- []C•ŸŽš,»,l̂,à,l̂,Æ,μ,Á^μ,í,ê,Ú,·[]B,½,Æ,l̂,í[]C\^ ,í ^ ,Æ^è`v,μ[]C[]s,l̂[]æ“ª,É,l̂^è`v,μ,Ú,¹,ñ

“ÁŽê<L[]t,l̂,μ,¿,ì 4 ,Á[]i\$[]C.[]C*[]C,“ ,æ,Ñ +[]j,í[]C“âfffbfR,l̂t,Á,í“ÁŽê,Ê^Ó-¿,ðŽ[],¿,Ú,¹,ñ[]B•ŸŽš
 ^ ,ª“Á•É^μ,ç,³,è,é,l̂,í[]C[]W[]#`è<` ,l̂Žn,Ú,è,l̂¼CEä[]i[<L[]t,l̂¼CEä[]j,É, ,é[]è[]#,¾,·,Á,·[]B

GREP ,À,ìftf@fCf<,ìŽw'è

ŠÖ~A□€-Ú

ftf@fCf<f|fvfVf†f“ ,Å□CGREP ,ÉŸŸ□ō,·,éftf@fCf<,đ'É'm,μ,Û,·□Bftf@fCf<,í□C-¾Ž!“I,Éftf@fCf<-
¼,À,à□CDOS ,íf□fCf<fhfj□[fh,ì ? ,Û,½,Í * ,đŠÛ,p•ïŠ†“I,Éftf@fCf<-¼,À,à,©,Û,¢
,Û,¹,ñ□B,³,ç,É□CfpfX□ifhf%ofCfu,ÆfffBfCefNfgfŠ,ì□î•ñ□j,đŽw'è,·,é,±
,Æ,à,À,«,Û,·□BfpfX,đŽw'è,μ,È,¢,Åftf@fCf<,đfŠfXfg,·,é,Æ□CGREP
,Íj|fCef“fgfffBfCefNfgfŠ,đŸŸ□ō,μ,Û,·□Bftf@fCf<,đ,Û,À,½,Žw'è,μ,È,¢□é□†□□CGREP ,Ö,ì“ü—
Í,đfŠf_fCfCefNfvf†f“□i<□j,Û,½,ÍfpfCfv□i|□j,©,ç—^,!,é•K—v,^a, ,è,Û,·□B

GREP ,ižg,ç•û,i—á

ŠÖ~A□€-Ú

%o°<L,i—á,Å□CGREP ,i<@“\,đ‘g,Ý□‡,í,¹,Ä□C,³,Ü,´,Ü,ÈCEŸ□đ,đ□s,π•û-@,đŽ!,μ,Ü,·□B,±,±,
,Å,Í□CGREP ,iſfftfHf<fg□Ÿ‘è,ª•í□X,³,ê,Ä,ç,É,ç,à,ì,Æ,μ,Ü,·□B

grep -r [^a-z]main\ *(*.c
grep -ri [a-c]:\\data\.fil *.c *.inc
grep "search string with spaces" *.doc *.c
grep -rd "[,.:?'\"]"\$ *.doc
grep -w[=] = *.c

GREP ,lžg,ç•û,l—á 1

ŠÖ~A□€-Ú

fRf}f“fh

```
grep -r [^a-z]main\ *( *.c
```

^ê’v

```
main(i,j:integer)  
if (main ()) halt;
```

•s^ê’v

```
mymain()  
if (MAIN ()) halt;
```

%ođ□à

,±,ìCEÿ□õ•¶Žš—ñ,í□C’¼’O,É□¬•¶Žš,ª,È,□i[^a-z]□j□C’¼CEã,É 0 CEÂ^È□ã,ìfXfy□[fX□\i*□j,ª, ,è□C,»),ìCEã,É□¶fjfbfR,ª, ,é’PCEê main ,đCEÿ□õ,.,é,±,Æ,đŽ|,µ,Ä,ç ,Ü,·□BfXfy□[fX,Æf^fu,í□C’É□í,í,ç,¿,ç,àfRf}f“fhf%ofCf“fffŠf~f^,Æ,Ý,È,³,ê,é,ì,Å□C□³<K•\CE»,ì^ê•”,Æ,µ,Ä,±,ê,ç,đŠÜ,ß,é□ê□‡,É,í□C^ø—p•,,,Å^í,þ,©%o~<L□†,đ’O,É•t,_,é•K—v,ª, ,è,Ü,·□B,±,ì—á,Å,í□Cmain ,ìCEã,ìfXfy□[fX,É□CfGfXfP□[fv•¶Žš,ì%o~<L□†,đ•t,_,Ä,ç,Ü,·□B“ñ□d^ø—p•,,,ì†,ÉfXfy□[fX,đ“ü,ê,Ä,à□C“_,¶CE<%oÉ,É,È,è,Ü,·□B

GREP ,ižg,č•û,i—á 2

ŠÖ~A□€-Ú

fRf}f“fh

```
grep -ri [a-c]:\\data\\.fil *.c *.inc
```

^ê'v

A:\\data.fil

B:\\DATA.FIL

c:\\Data.Fil

•s^ê'v

d:\\data.fil

a:data.fil

%ođ□à

%o~<L□+□i□j,ÆfsfŠflfh□i.□j,Í□CfpfX,âftf@fCf<-¼,Å,à“Á•Ê,È^Ó-; ,đŽ□,Â,ì,Å□CfpfX,âftf@fCf<-¼,đĀŸ□ō,μ,½,č□ê□‡,É,í□C,±,ì•ŋŽš,ì'O,ÉfGfXfP□[fv•ŋŽš,ì%o~<L□+,đ“ü,ê,é•K—v,^a, ,è,Ú,·□B, ±,±,Å,í -i flfvfVf‡f“ ,đŽg,Á,Å,č,é,ì,Å□C,±,íĀŸ□ō,í'â•ŋŽš,Æ□→•ŋŽš,đ<æ•Ê,μ,Ú,¹,ñ□B

GREP ,iŽg,ç•û,i—á 3

ŠÖ~A[]€-Ú

fRf}f“fh

grep "search string with spaces" *.doc *.c

^ê’v

This is a search string with spaces in it.

•s^ê’v

This search string has spaces in it.

%ođ[]à

fXfy[]fX,đŠÜ,þ•¶Žš—ñ,đŒŸ[]ō,μ,Û,·[]B

GREP ,ižg,ç•û,i—á 4

ŠÖ~A□€-Ú

fRf}f“fh

```
grep -rd "[ ,.:?'\"]"$ \*.doc
```

^ê'v

He said hi to me.

Where are you going?

In anticipation of a unique situation,

Examples include the following:

"Many men smoke, but fu man chu."

•s^ê'v

He said "Hi" to me

Where are you going? I'm headed to the

%ođ□à

,±,ì—á,Å,í□C□s--É “.:?', ,ì,κ,ζ,ì,Ç,ê,©,ª, ,é□s,đ'T,μ,Û,·□B'åfjfbfR,ì't,ì“ñ□d^ø—
p•,,,í□C'O,ÉfGfXfP□[fv•¶Žš,ª, ,é,ì,Å□C•¶Žš—ñ,ì^ø—p,ì□l,è,Å,í,É,-
□C'É□í,ì•¶Žš,Æ,μ,Å^μ,í,ê,Û,·□B,Û,½□C\$ <L□t,í□C^ø—p•,,,Å^í,Û,ê,½•¶Žš—ñ,ìŠO'κ
,É, ,è,Û,·□B,±,ê,í□C□³<K•\CE»,đ~ACE<,μ,Ä',ç•\CE»,đ□ì,é•û-@,ì—á,Å,·□B

GREP ,ižg,č•û,i—á 5

ŠÖ~A□€-Ú

fRf}f“fh

```
grep -w[=] = *.c
```

^ê'v

```
i = 5;
```

```
j=5;
```

```
i += j;
```

•s^ê'v

```
if (i == t) j++;
```

```
/* ===== */
```

%ođ□à

,±,ì—á,Å,í□C'PCEê,đ□\□-,·,é•¶Žš,ì□W□‡,đ'ã"ü%o

%oŽŽŽq□i=□j,¾,̄,É□Ā'è<` ,μ,Ā,© ,ç'PCEêCEŸ□đ,đ□s,Ā,Ā,ç,Ū,·□B,±,ê,í□C"™ □t□i=□j,đ 1

,Ā,¾,̄ Žg,κ C ,ìã"ü•¶,Æ^ê'v,μ,Ū,·,ª□C"™ □t,đ 2 ,ĀŽg,κ"™ %o¿"ãŠr□i=□j,É,í^ê'v,μ,Ū,¹,ñ□B

IMPLIB ,ižg,č•û

SÖ~A□€-Ú

IMPLIB ft□[fefBfŠfefB,ífCf“f□[fgf%ofCfuf%ofŠ,ð□i□-,μ,Û,·□BIMPLIB ,í□C“ü—í,Æ,μ,Ä DLL ,©f,fWf...□[f<`è<`ftf@fCf<□C,Û,½,í,» ,ì—¼•û,ðŽæ,è□ž,Ý□C□o—í,Æ,μ,ÄfCf“f□[fgf%ofCfuf%ofŠ,ð□i□-,μ,Û,·□BIDE ,í DLL f^□[fQfbfg,ì,½,ß,ífgf%of“fXfCE□[f^,Æ,μ,Ä IMPLIB ,ðŽg—p,μ,Û,·□B

Windows fAfvfŠfP□[fVf#f“ ,ð□i□-,μ,½,±,Æ,ª , ,é,È,ç,í□C□,È,,Æ,à 1 ,Ä,ífCf“f□[fgf%ofCfuf%ofŠ□C,Ä,Û,è•W□€,ì Windows DLL ,ífCf“f□[fgf%ofCfuf%ofŠ,Ä , ,é IMPORT32.LIB ,ðŽg,Ä,Ä,ç ,Û,·□iIMPORT32.LIB ,í□CIDE ,Ä Windows fAfvfŠfP□[fVf#f“ ,ð□i□-, , ,é□è□#,â BCC32 ,ÄfŠf“fN , , ,é□è□#,ÉŽ©“ @“l,ÉfŠf“fN,ª,è,Û,·□BTLINK32 ,ðŽg,Ä,Ä’P“Æ,ÄfŠf“fN,ð□s,α□è□#,ì,Ý-¾Žì“l,É IMPORT32.LIB ,ðŽw’è,μ,ÄfŠf“fN,μ,Ä,,¾,¾,ç□j□B

fCf“f□[fgf%ofCfuf%ofŠ,É,í□C1 ,Ä^È□ã,ì DLL ,ì^è•” ,Û,½,í, , ,x,Ä,ífGfNfXfj □[fgSÖ□” ,ífŠfXfg,ª<L□q,ª,è,Û,·□BIMPLIB ,í□C“¼□Ú DLL ,©,ç□C,Û,½,í DLL ,íf,fWf... □[f<`è<`ftf@fCf<,©,ç□i,Û,½,í,±,ì 2 ,Ä,ì•û-@,ð’g,Ý□#,ì,¹,Ä□jCf“f□[fgf%ofCfuf%ofŠ,ð□i□-,μ,Û,·□B

DLL ,ífCf“f□[fgf%ofCfuf%ofŠ,ì□i□-

flfvfVf#f“ ,í•K, ,□-•¶žš,É,μ□C’O,ÉfnfCftf“ ,©fXf%ofbVf...,ð•t, ,Û,·□B ŽŸ,ì,æ,α,É“ü—í,μ,Û,·□B

```
IMPLIB flfvfVf#f“ f%ofCfuf%ofŠ-¼ [ `è<`ftf@fCf< ...□b DLL... ] [ @fCEfXfj f“fXftf@fCf<]
```

,±,±,Ä□CflfvfVf#f“ ,í 1 ,Ä^È□ã,ì IMPLIB flfvfVf#f“ ,ífŠfXfg,Ä□Cf%ofCfuf%ofŠ-¼,í□V,μ,- □i□-, , ,éCf“f□[fgf%ofCfuf%ofŠ,ì-¼’O,Ä,·□B`è<`ftf@fCf<,í 1 ,Ä^È□ã,ì DLL — p,É, ,Ä,É□i□-,ª,è,½ 1 ,Ä^È□ã,íf,fWf...□[f<`è<`ftf@fCf<,ífŠfXfg,Ä□CDLL ,í, ,Ä,É□i□-,ª,è,Ä,ç,é 1 ,Ä^È□ã,ì DLL ,ífŠfXfg,Ä,·□B□,È,,Æ,à 1 ,Ä,ì DLL ,©f,fWf...□[f<`è<`ftf@fCf<,ðŽw’è, , ,é•K—v,ª , ,è,Û,·□B

fCEfXfj|f“fXftf@fCf<,ðŽg,Ä,Ä□C□^—□, , ,é .DEF ftf@fCf<,Æ .DLL ftf@fCf<,ð^è—•Žì, , ,é,± ,Æ,à,Ä,« ,Û,·□BfCEfXfj|f“fXftf@fCf<,í□Cftf@fCf<,ífŠfXfg,ðŠÛ,pfefLfXfgftf@fCf<,Ä,·□BfCEfXfj f“fXftf@fCf<“à,Ä□Cftf@fCf<,ífXfy□[fX,Û,½,í%oü□s,Ä<æ□Ø,é•K—v,ª , ,è,Û,·□BfRf}f“fhf%ofCf“ ,ÄfCEfXfj|f“fXftf@fCf<,ðŽw’è, , ,é,É,í□C , , ,† @ ,ìCEã,ÉfCEfXfj|f“fXftf@fCf<-¼,ð“ü—í,μ,Û,·□B,½,Æ,ì,žŸ,ì,æ,α,É“ü—í,μ,Û,·□B

```
implib foo.lib @respon.txt
```

□^Ó: DLL ,ìŠg’£žq,É,í□C.DLL ,¾, ,Ä,È, .EXE ,â .DRV ,àžg—p,Ä,« ,Û,·□B

flfvfVf#f“	<@“\
-c	‘ã•¶žš,Æ□-•¶žš,ì,Ý,ª^Û,È,éfvf“f{f<,É’í, , ,éCex□□,ð•Žì,μ,È,ç
-f	-¼’O,ðŽg,Ä,ÄfCf“f□[fg,ð□s,α
-i	IMPLIB ,É WEP ,ð-¾ž<,ª,¹,é□BWEP ,í□CDLL ,ð□i—¹,ª,¹,é,½,ß,É•K—v,È Windows □i—¼fvf□fV□[fWff□BIMPLIB fRf}f“fhf%ofCf“ ,Ä•i□” ,ì DLL ,ðŽw’è,μ,Ä,ç,é,Æ,« ,É,±,íf fvfVf#f“ ,ðŽg,α
-o	f,fWf...□[f<,ìŠg’£žq,ðŽæ,è□œ,□i16fRfbfg Windows ,ì,Ý□j
-w	CEx□□,ð•Žì,ª,¹,È,ç,æ,α,É, , ,é

f,fWf...[f<'è<`ftf@fCf<f}f][fWff,ìŽg,ç•û(IMPDEF)

ŠÖ~A[€-Ú

fCf“f][fgf%ofCfuf%ofŠ,í Windows DLL ,ìŠÖ” ,Ö,ìfAfNfZfX,đ'ñ<Ÿ,μ,Û,·B

IMPDEF ,í“ü—í,Æ,μ,Ä DLL -¼,đŽæ,èž,ŸC[o—í,Æ,μ,Ä DLL ,afGfNfXf][fg,; ,éŠÖ” -¼,ì<L[q,³,ê,½fGfNfXf][fgfZfNfVf+f“ ,đŠÛ,pf,fWf...[f<'è<`ftf@fCf<,đi[μ,Û,·B

[•¶,ìŽŸ,ì,Æ,; ,è,Ä,·B

IMPDEF [o—íftf@fCf<-¼ .DEF “ü—íftf@fCf<-¼ .DLL

,±,ê,đŽÄ[s,; ,é,ÆC“ü—íftf@fCf<-¼.DLL ,©,çf,fWf...[f<'è<`ftf@fCf<,ª [o—íftf@fCf<-¼.DEF ,Äi[μ,³,ê,Û,·B[i[μ,³,ê,é,f,fWf...[f<'è<`ftf@fCf<,ìŽŸ,ì,æ,α,É,È,è,Û,·B

LIBRARY ftf@fCf<-¼

DESCRIPTION 'à-¾'

EXPORTS

fGfNfXf][fgŠÖ”-¼ @~”

·
·
·

fGfNfXf][fgŠÖ”-¼ @~”

,±,±,ÄC

- ftf@fCf<-¼,í DLL ,ìftf@fCf<-¼,©,çfpfX,ÆŠg'fŽq,đŽæ,èœ,ç,½,à,ì
- à-¾,í DLL ,ª DESCRIPTION •¶,đ<L[q,μ,½f,fWf...[f<'è<`ftf@fCf<,Æ,; ,Ä,ÉfŠf“fN,³,ê,Ä,ç ,éê¶,ì DESCRIPTION •¶,ì'ì
- fGfNfXf][fgŠÖ”-¼,ìfGfNfXf][fg,³,ê,Ä,ç,éŠÖ” ,ì-¼'O
- ~” ,ì,»,ìŠÖ” ,ì¶~” ,ì'ìi®”j

DLL ,išÖ

ŠÖ~A€-Ú

IMPDEF ,íCDLL ,ì,·,x,Ä,lfGfNfXfj[]fgšÖ" ,lfšXfg,δ<Lq,μ,½•ÖW%Ä"\,Éf
[]fXftf@fCf<,ð[]i- ,μ,Ü,·B,±,ì .DEF ftf@fCf<,ð•ÖW,μ,ÄC"Á'è,lfAfvfšP[]fVf#",Ä-~
p,μ,½,çšÖ",¾, -,ðšÜ,p,æ,x,É•ÖW,μ,Ä,©,çC,±,ì•ÖW,μ,½ .DEF ftf@fCf<,Ä IMPLIB
,ðŽÄs,Ä,«,Ü,·B,±,ì€<%ÉCDLL ,lfGfNfXfj[]fgšÖ" ,ì"Á'è,ÉfAfvfšP[]fVf#",É•K-
v,ÉšÖ",ÉšÖ,·,éfCf"f[]fgi•ñ,ì,Ý,ðšÜ,pfCf"f[]fgf%ofCfuf%ofš,ð[]i- ,·,é,±,Æ,ª,Ä,«,Ü,·B
•;[]",lfAfvfšP[]fVf#",ÄŽg-p,¾,è,éšÖ",ð'ñ<ÿ,·,é DLL ,ð[]i- ,μ"z•z,·,é[]è[]#,É,Ä,ç,Ä[]i,ì,Ä,ç
,Ü,·B,·,x,Ä,lfGfNfXfj[]fgšÖ" ,ì export ,Ä'è< ,¾,è,Ä,ç,Ü,·B,Ü,·C,·,x,Ä,lfAfvfšP[]fVf#",ª
DLL ,ì,·,x,Ä,lfGfNfXfj[]fgšÖ" ,ðŽg,x,Æ,·,è,ìCIMPLIB ,ðŽg,Ä,Ä DLL ,É'í,μ,ÄfCf"f[]fgf%ofCfuf
%ofš,ð 1 ,Ä[]i,è,ì,æ,ç,ì,Ä,·BDLL ,Æ,Æ,à,É,±,lfCf"f[]fgf%ofCfuf%ofš,ð"z•z,Ä,«[]CfCf"f[]fgf
%ofCfuf%ofš,ì DLL ,ì,·,x,Ä,lfGfNfXfj[]fgšÖ" ,lfCf"f[]fgi•ñ,ð'ñ<ÿ,μ,Ü,·B,±,lfCf"f[]fgf
%ofCfuf%ofš,ì,ç,lfAfvfšP[]fVf#",Æ,àšf"fN,Ä,«,é,ì,ÄC"Á'è,lfAfvfšP[]fVf#",ÄŽg,x,·,x,Ä,ì
DLL šÖ" ,ðf,fWf...[]f'è< ftf@fCf<,ì IMPORTS fzfnfvf#",É-ñ< ,·,é•K-v,ì ,è,Ü,¹,ñB
[]i"x,íCDLL ,ì,ç,,Ä,©,lfGfNfXfj[]fgšÖ" ,¾, -,ð"Á'è,lfAfvfšP[]fVf#",É'ñ<ÿ,μ,½,ç
,à,ì,Æ,μ,Ü,·B,±,lfAfvfšP[]fVf#",ìCfAfvfšP[]fVf#",ªŽg-p,·,éšÖ",lfTfufZfbg,¾, -,lfCf"f[]
[]fgi•ñ,ð'ñ<ÿ,·,é,æ,x,ÉfjXf^f}fCfY,·,½fCf"f[]fgf%ofCfuf%ofš,Äšf"fN,·,é,ì,ªÄ"K,Ä,·BDLL
,ì,Ü,©,lfGfNfXfj[]fgšÖ" ,ìC,·,x,Ä,±,lfNf%ofCfAf"fGfAfvfšP[]fVf#",É'í,μ,Ä
%B,¾,è,½,à,ì,Æ,É,è,Ü,·B
,±,ì,æ,x,É[]ðC,ð-ž'«,·,éfCf"f[]fgf%ofCfuf%ofš,ð[]i- ,·,é,É,ìCfRf"fpfCf<,Æšf"fN,ª[]i,ñ,¾
DLL ,É'í,μ,Ä IMPDEF ,ðŽÄs,μ,Ü,·BIMPDEF ,íCDLL ,ì,·,x,Ä,lfGfNfXfj[]fgšÖ" ,ð-ñ< ,μ,½
EXPORTS fzfnfvf#",ðšÜ,pf,fWf...[]f'è< ftf@fCf<,ð[]i- ,μ,Ü,·B,±,lf,fWf...
[]f'è< ftf@fCf<,ð•ÖW,μCfjXf^f}fCfY,·,éfCf"f[]fgf%ofCfuf%ofš,Ä,ìC•s-v,ÉšÖ" ,É'í
%ž,·,é EXPORTS fzfnfvf#",lfGf"fgfš,ð[]iœ,μ,Ü,·B,±,lf,fWf...[]f'è< ftf@fCf<,É'í,μ,Ä IMPLIB
,ðŽÄs,·,é,ÆC[]i- ,¾,è,½fCf"f[]fgf%ofCfuf%ofš,É,ìCf,fWf...[]f'è< ftf@fCf<,ì EXPORTS
fzfnfvf#",É-ñ< ,μ,½fGfNfXfj[]fgšÖ" ,¾, -,ÉšÖ,·,éfCf"f[]fgi•ñ,ªšÜ,Ü,è,Ü,·B

TLIB ,ižg,č•û

ŠÖ~A□€-Ú

- Turbo C++ ,É,íRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,ê,Ä,č,Û,¹,ñ□B
Šù‘¶,ìf%ofCfuf%ofŠ,đ•í□X,·,é,Æ,«□CTLIB ,í□í,ÉCE³,ìf%ofCfuf%ofŠ,đfRfs□[,μ□C.BAK
Šg’£Žq,đ•t,¯,Ä•Ú‘¶,μ,Ä,¯,«,Û,·□B

f%ofCfuf%ofŠ,ì□ì□-,Û,½,í•í□X

Borland C++ ,ÉŠÜ,Ü,ê,é%ofCfuf%ofŠ,í□CTLIB ,đŽg,Á,Ä□ì□-,³,é,½,à,ì,Ä,·□BTLIB ,đŽg,α
,Æ□Cft□[fU□[Ž©□g,ìf%ofCfuf%ofŠ,í•í□X,đ□s,Á,½,è□CBorland C++ ,ìf%ofCfuf
%ofŠ□Cft□[fU□[,³□ì□-,μ,½f%ofCfuf%ofŠ□C,Û,©,ìfvf□fOf%of},³□ì□-,μ,½f%ofCfuf
%ofŠ□C,Û,½,ì□w“ü,μ,½Žs”ì,ìf%ofCfuf%ofŠ,đ•í□X,μ,½,è,Ä,«,Û,·□B

,³,ç,É□C^È%o^e,ì,±,Æ,à□s,ì,Û,·□B

- flfufWfFfNfgf,fWf...□[f<,ìfOf<□[fv,©,ç□V,μ,çf%ofCfuf%ofŠ,đ□ì□-,·,é
- Šù‘¶,ìf%ofCfuf%ofŠ,ÖflfufWfFfNfgf,fWf...□[f<,â,Û,©,ìf%ofCfuf%ofŠ,đ’Ç%oÁ,·,é
- Šù‘¶,ìf%ofCfuf%ofŠ,©,çflfufWfFfNfgf,fWf...□[f<,đ□í□œ,·,é
- Šù‘¶,ìf%ofCfuf%ofŠ,ìflfufWfFfNfgf,fWf...□[f<,đ’u,«Š·,ì,é
- Šù‘¶,ìf%ofCfuf%ofŠ,©,çflfufWfFfNfgf,fWf...□[f<,đ’Š□o,·,é
- □V<K,Û,½,ÍŠù‘¶,ìf%ofCfuf%ofŠ,ì“à—e,đ^ê—•Žì,·,é

TLIB ,í□CfŠf“fN,đ□,‘-%o»,·,é,½,β,ÉŽg,í,ê,éŠg’£Ž«□’,à□ì□-,Á,«,Û,·□i,»,μ,Äf%ofCfuf
%ofŠftf@fCf<,ì’t,ÉŽæ,è□ž,Ý,Û,·□j□B

Borland C++ ,ÄŽÀ□sCE`Ž@fvf□fOf%of€e,đ□ì□-,·,é□ã,Ä TLIB ,í•K,·,μ,à•K—
v,È,à,ì,Ä,í,·,è,Û,¹,ñ,³□C’ã,«,ÉŠJ”fvf□fWfFfNfg,É,íCE‡,©,¹,È,ç□C•Ö—~ ,Èfc□[f<,Á,·□B

TLIB fRf}f“fhf%ofCf“flfvVf#f“

ŠÖ~A□€-Ú

- Turbo C++ ,É,lfRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,ê,Ä,ç,Ü,¹,ñ□B
 TLIB fRf}f“fhf%ofCf“,ì^è”ÊĈ`Ž@,ÍŽŸ,ì,Æ,¨,è,Å,·□B`âfjfbfR,ì†,ì□€-Ú,ì□€—ª%oÅ”\,Å,·□B
 tlib [fCfXf|f“fXftf@fCf<] [flfvVf#f“] f%ofCfuf%ofŠ-¼ [%o%oŽŽŽq]
 [□CfŠfXfgftf@fCf<]

TLIB flfvVf#f“

TLIB flfvVf#f“,lfif“f%ofCf“—v-ñ,ð•\Žì,·,é,É,í□CTLIB ,Æ“ü—í,μ,Ä□kEnter□,ð%Ÿ,μ,Ü,·□B

flfvVf#f“	<@”\
<u>fCfXf f“fXftf@fCf<</u>	Žæ,è□ž,þfCfXf f“fXftf@fCf<,lfpfX,¨,æ,Ñ-¼’O□B•i□”,lfCfXf f“fXftf@fCf<,lŽw’è,ª%oÅ”\
f%ofCfuf%ofŠ-¼	□ì□-,Ü,½,ÍŠÇ—□,·,éf%ofCfuf%ofŠ,lfpfX-¼□B,Ç,ì TLIB fRf}f“fh,É,à•K,·f%ofCfuf%ofŠ-¼,ðŽw’è,·,é□Bf□fCf<fhfj□[fh,ìŽw’è,í•s%oÅ□BŠg’ÉŽq,ð□É—ª,·,é,Æ□CŠg’ÉŽq .LIB ,ðŽw’è,μ,½,à,ì,Æ,Ÿ,É,³,ê,é□BBCC ,¨,æ,Ñ IDE ,Å,í .LIB Šg’ÉŽq,Åf%ofCfuf%ofŠftf@fCf<,ð”FŽ¨,·,é,½,β□CŠg’ÉŽq,í .LIB ,ì,Ÿ,ðŽg—p□B’□^Œ: Žw’è,³,ê,½-¼’O,lf%ofCfuf%ofŠ,ª,È,ç□é□#,É □{ %o%oŽŽŽq,ªŽw’è,³,ê,Å,ç,é,Æ□CTLIB ,lf%ofCfuf%ofŠ,ð□V<K□ì□-,·,é
<u>/C</u>	’à•qŽš,Æ□-•qŽš,ð<æ•É,·,éftf%ofO□B’É□í,±,lfiflvVf#f“,lŽg—p,μ,É,ç
<u>/E</u>	Šg’ÉŽ<□’,ð□ì□-,·,é
<u>/Psize</u>	f%ofCfuf%ofŠ,lfy□[fWfTfCfY,ð size ,É□Ÿ’è,·,é
<u>/O</u>	fRf□f“fgfCfR□[fh,ì□í□œ
<u>%o%oŽŽŽqfŠfXfg</u>	TLIB ,ªŽÀ□s,·,é%o%oŽŽŽq,lfŠfXfg□B%o%oŽŽŽq,ì□#□¨,í”C^Ó□B’P,Éf%ofCfuf%ofŠ,ì”à—e,ð’²,x,½,ç□é□#,í%o%oŽŽŽq,ðŽg,í,É,ç
fŠfXfgftf@fCf<	f%ofCfuf%ofŠ,ì”à—e,lfŠfXfg,ð□o—í,·,éftf@fCf<,ì-¼’O□BfŠfXfgftf@fCf<-¼,ðŽw’è,·,é□é□#,ì□C’O,Éfjff“f} ,ð•t,¨,É,¨,è,í,É,ç,É,ç□Bftf@fCf<-¼,ðŽw’è,μ,É,ç ,ÆfŠfXfg,í□ì□-,³,è,É,ç□BfŠfXfg,ÍŠef,fWf... □[f<,lfAf<ftf@fxfbfg□#,É•Žì,³,è,é□BŠef,fWf... □[f<,lfGf“fgfŠ,É,í□C,» ,lf,fWf... □[f<,ì†,Å’è<¨,³,è,½ŠefpfufŠfbfNfVf“f{f<,lfAf<ftf@fxfbfg□#,lfŠfXfg,ªŠÜ,Ü,è,é□BfŠfXfgftf@fCf<,lffftfHf<fg,ÍŠg’ÉŽq,í .LST□BfŠfXfg ,ì□CfŠfXfgftf@fCf<-¼,Æ,μ,Å CON ,ðŽg,ª,Æ%oæ-É,É□o—í,Å,«□CPRN ,ðŽg,ª,ÆfvfŠf“f^,É□o—í,Å,«,é

TLIB fCfXf|f"fxftf@fCf<,iŽg,č•û

ŠÖ~A□€-Ú

- Turbo C++ ,É,lfRf}f"fhf%ofCf"fc□[f<,ÍŠÜ,Ü,ê,Ä,č,Û,¹,ñ□B
,½,,³,ñ,lfAfNfVf#f" <L□†,đŽg,α□ê□#□C, ,é,č,í%½"x,à"~,¶'€□ì,đCJ,è•Ô,·,æ,α,È□ê□#É,lfCfXf|
f"fxftf@fCf<,đ~—p,·,é,Æ•Ö—~ ,Ä,·□BfCfXf|f"fxftf@fCf<,í ASCII fefLfXfgftf@fCf<□iBorland
C++ ,lfGfffBf^ ,Á□□- ,Ä,« ,Û,·□j,Ä ,è□CTLIB fRf}f"fh,ì,·,x,Ä ,é,č,í,» ,í^ê•" ,đ<L□q,μ,Û,·□BTLIB
fCfXf|f"fxftf@fCf<,đŽg,α,Æ□CfRf}f"fhf%ofCf" 1 □s,É"ü,è,« ,ç,É,č'·,č TLIB
fRf}f"fh,đ□□- ,Ä,« ,Û,·□BfCfXf|f"fxftf@fCf<,Ä,í^É%º,ì,±,Æ,ª%Á"\ ,Ä,·□B
• i□"□s,lfefLfXfg,đ<L□q,Ä,« ,é□B□s-- ,ÉfAf"fh<L□† (&) ,đ'u,č,ÄŽÝ,ì□s,ÉŽw'è,ª'±,,±,Æ,đŽ!,·
fRf}f"fhfŠfXfg,í^ê•" ,đŽæ,è□ž,β,é□BfRf}f"fhf%ofCf" ,lf|fvfVf#f" ,ÆfCfXf|
f"fxftf@fCf<,lf|fvfVf#f" ,ìC<□# ,ª%Á"\
1 ,Ä,ì TLIB fRf}f"fhf%ofCf" ,Ä• i□" ,lfCfXf|f"fxftf@fCf<,ªŽg—p%Á"\

TLIB /C flfvfVf†f“

ŠÖ~A□€-Ú

- Turbo C++ ,É,lfRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,ê,Ä,ç,Û,¹,ñ□B

f%ofCfuf%ofŠ,Ä,ì'â•¶Žš,Æ□-•¶Žš,ð<æ•Ê,.,éfvf“f{f<,ìŽg—p

f%ofCfuf%ofŠ,Éf,fWf...□[f<,ð'Ç%oÁ,.,é,Æ,«□CTLIB ,lf%ofCfuf%ofŠ,lf,fWf...□[f<,Ä'è<`³,è,Ä,ç,é,.,x,Ä,lfpfufŠfbfNfVf“f{f<,ìŽ«□',ð•ÚŽç,μ,Û,·□Bf%ofCfuf%ofŠ“à,ì,.,x,Ä,lfVf“f{f<,â□d•i,μ,É,ç,æ,π,É,.,é•K—v,^a, ,è,Û,·□BfVf“f{f<,â□d•i,.,é,æ,π,Éf,fWf...□[f<,ðf%ofCfuf%ofŠ,É'Ç%oÁ,μ,æ,π,Æ,.,é,Æ□CTLIB ,lfGf%o□[f□fbfZ□[fW,ð•\Ž!,μ□C,±,lf,fWf...□[f<,ð'Ç%oÁ,μ,Û,¹,ñ□B

'Ê□í□CTLIB ,âf%ofCfuf

%ofŠ“à,lfVf“f{f<,ì□d•i,ðf`fFfbfN,.,é,Æ,«□C'â•¶Žš,Æ□-•¶Žš,ì<æ•Ê,í,μ,Û,¹,ñ□i,½,Æ,ì,í□CfVf“f{f< lookup ,Æ LOOKUP ,ì□d•iVf“f{f<,Æ,μ,Ä^μ,í,è,Û,¹,ñ□j□B/C

flfvfVf†f“,ðŽg,Á,Ä•¶Žš,ì'â□-^{3/4},⁻,â^Û,É,éfvf“f{f<,ðŠÜ,þf,fWf...□[f<,ðf%ofCfuf%ofŠ,É'Ç%oÁ,Ä,«³,Û,·□B

f%ofCfuf%ofŠ,ð,Û,©,lfŠf“fj,ÄŽg,Á,½,è,Û,©,ì□i,^aŽg,π,±,Æ,^a, ,é□ê□±,í□C/C ,ðŽg—p,μ,É,ç,Ä,-^{3/4},³,ç□B

TLIB ,í'Ê□í□C'â•¶Žš,Æ□-•¶Žš,ì^á,ç,^a, ,é,^{3/4},⁻,Ä,à□CfVf“f{f<,ðŽó,⁻•t,⁻,Û,¹,ñ□B,»³,ì—□—

R,í□CfŠf“fj,É,æ,Á,Ä,ì'â•¶Žš,Æ□-•¶Žš,ì<æ•Ê,ð,μ,É,ç,à,ì,^a, ,é,©,ç,Ä,·□BTLINK

,Ä,í□CfVf“f{f<,ì'â•¶Žš,Æ□-•¶Žš,ð<æ•Ê,μ,Ä,à-â'è,í<N,±,è,Û,¹,ñ□BTLINK ,Ä,ì,Yf%ofCfuf%ofŠ,ðŽg,π□ê□±,í□CTLIB /C flfvfVf†f“,ðŽg,Á,Ä,à%½,à-â'è,í, ,è,Û,¹,ñ□B

TLIB /E flfvfVf†f“

ŠÖ~A□€-Ú

- Turbo C++ ,É,ÍfRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,ê,Ä,ç,Û,¹,ñ□B

Šg'£Ž«□',ì□ì□-

TLIB ,đŽg,Á,ÄŠg'£Ž«□',đ□ì□-,μ□C,±,ê,đf%ofCfuf%ofŠftf@fCf<,É'Ç%oÁ,·,é,Æ□C'â<K-
Í,ÉfŠf“fN,ì□Ú□□TLINK ,ì“\—í,^aCEù□ā,μ□C'â<K-Í,ÉfŠf“fN,^a%oÁ“\,É,É,è,Û,·□B,±,ÌŽ«□',É,Í•W□€,ìf
%ofCfuf%ofŠŽ«□',É,ÍŠÜ,Ü,ê,È,ç□î•ñ,^afRf“fpfNfg,ÈCE` ,Å“ü,Á,Ä,ç,Û,·□BTLINK ,ì□C,±
,ì□î•ñ,đŽg,Á,Äf%ofCfuf%ofŠftf@fCf<,ì'O□^—□,đ□s,ì,Î•s—v,Éf,fWf...□[f<,ì'O□^—
□,đ□s,í,,É□Í,Ý,Û,·□B

□X□V,μ,æ,æ,Æ,·,éf%ofCfuf%ofŠ,ÌŠg'£Ž«□',đ□ì□-,·,é,É,ì□Cf%ofCfuf%ofŠ,Éf,fWf...□[f<,đ'Ç
%oÁ□C□í□œ□C'uS·,·,é,½,ß,É TLIB ,đ<N“®,,é,Æ,«,É /E flfvfVf†f“ ,đŽg,ç
,Û,·□B□X□V,μ,È,çŠù'¶,ìf%ofCfuf%ofŠ,É,à /E
flfvfVf†f“ ,đŽg,Á,ÄŠg'£Ž«□',đ□ì□-,Á,«,Û,·□B,½,Æ,ì,Î□CŽŸ,ì,æ,æ,É“ü—í,·,é,Æ□TLIB
,ÌŽw'è,³,è,½f%ofCfuf%ofŠ,ÉŠg'£Ž«□',đ'Ç%oÁ,μ,Û,·□B

tlib /E mylib

fŠf“fNŽž,É "Table limit exceeded" ,Æ,ç,æf□fbfZ□[fW,^a•\Žì,³,è,½,ç□C/E
flfvfVf†f“ ,đŽg,Á,Ä,Ý,Ä,³/₄,³,ç□B

TLIB /P flfvfjff“

ŠÖ~A□€-Ú

- Turbo C++ ,É,lfRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,è,Ä,ç,Ü,¹,ñ□B

‘â,«,Èf%ofCfuf%ofŠ,ð□ì□-,·,é,½,ß,lfy□[fWfTfCfY,ì□Y’è

,·,x,Ä,ì DOS f%ofCfuf%ofŠftf@fCf<,É,í□C.LIB
 ftf@fCf<,ì□ÄĈä□C,Ä,Ü,è,·,x,Ä,lfufWfFfNfgf,fWf...□[f<,ìĈä,è,ÉŽ«□’,^a“ü,Ä,Ä,ç,Ü,·□B,±
 ,ìŽ«□’,É,í□Cf%ofCfuf%ofŠ,ìŠef,fWf...□[f<,²,Æ,É□C.LIB ftf@fCf<“à,Ä,ì,»,lf,fWf...□[f<,ì 16
 frfbfgfAfhfĈfX,^a<L□q,³,è,Ä,ç,Ü,·□B,±,lfAfhfĈfX,lf%ofCfuf%ofŠ,lfy□[fWfTfCfY□iffftfHf<fg,í 16
 fofCfg□j,ð’P^É,Æ,μ,ÄŽ!,³,è,Ü,·□B

f%ofCfuf%ofŠ,lfy□[fWfTfCfY,É,æ,Ä,Ä□Cf%ofCfuf%ofŠ’t,ì,·,x,Ä,lfufWfFfNfgf,fWf...
 □[f<,ðĈ<□#,μ,½□Ä’â,ì’â,«,³æ^,Ü,è,Ü,·□Bfy□[fW□”,í 65,536
 ,ð’·,!,ç,è,Ü,¹,ñ□BffftfHf<fg□i,“,æ,Ñ□Ä□-□j,lfy□[fWfTfCfY,í 16 fofCfg,Ä, ,é,½,ß□C,±,ì□è□#
 %ofCfuf%ofŠ,lfTfCfY,í-ñ 1MB ,Ü,Ä%oÄ”\,Ä,·□B,æ,è’â,«,Èf%ofCfuf%ofŠ,ð□ì□-,·,é,É,í□C/P
 flfvfjff“ ,ðŽg,Ä,Äfy□[fWfTfCfY,ð’â,«,μ,Ü,·□Bfy□[fWfTfCfY,í 2 ,ì-Y□æ,Æ,μ□C□Ä□-’l,í
 16□C□Ä’â’l,í 32,768 ,Ä,·□B

f%ofCfuf%ofŠ’t,lf,fWf...□[f<,í□C,·,x,Äfy□[fW<<ŠE,ÄŽn,Ü,é•K-v,^a, ,è,Ü,·□B,½,Æ,!,í□Cfy□[fWfTf
 CfY,^a 32□iffftfHf<fg,í 16 ,æ,è’â,«,ç□Ä□-,lfy□[fWfTfCfY□j,lf%ofCfuf
 %ofŠ,Ä,í□CŠeflfufWfFfNfgf,fWf...□[f<,ìŠÖ,É•½<í 16 fofCfg,ì-çŽg-p-ì^æ,^a¶□Y,·,é,±
 ,Æ,É,È,è,Ü,·□BŽw’è,³,è,½fy□[fWfTfCfY,Ä,í□ì□-,Ä,«,É,ç□C’â,«,Èf%ofCfuf%ofŠ,ð□ì□-,μ,æ,
 ,Æ,·,é,Æ□CTLIB ,lfGf%o□[f□fbfZ□[fW,ð□o-í,μ□C/P
 ,ðŽg,Ä,Ä,à,æ^è’iŠK□ä,ì’â,«,³,lfy□[fWfTfCfY,ðŽw’è,·,é,æ,æ,É’£,μ,Ü,·□B

%%ZZZqfSfXfg

ŠÖ~A□€-Ú

- Turbo C++ ,É,lfRf}f“fhf%ofCf“fc□[f<,ÍŠÜ,Ü,ê,Ä,ç,Ü,¹,ñ□B
 %%ZZZqfSfXfg,É,Í TLIB ,É□s,í,¹,¹/₂,çfAfNfVf}f“<L□q,μ,Ü,·□BfSfXfg,í□C□#,É•Ä,x,¹/₂<L□t,Å□\
 □→,μ,Ü,·□BSe<L□t,í□C1 •¶Žš,Ü,¹/₂,í 2 •¶Žš,lfAfNfVf}f“<L□t,Æ,»,é,É'±,ftf@fCf<-¹/₄,Ü,¹/₂,lf,fWf...
 □[f<-¹/₄,Å□\□→,μ,Ü,·□BfAfNfVf}f“<L□t,í'OEã□C,Ü,¹/₂,lftf@fCf<-¹/₄,âf,fWf...□[f<-
¹/₄,í'OEã,É,lfzj□fCgfXfj□[fX,ð'u,¯,Ü,·,ª□C2 •¶Žš,lfAfNfVf}f“<L□t,ÍŠÖ,â-
¹/₄'O,ì'r't,É,í' }“ü,Ä,«,Ü,¹,ñ□B
 fRf}f“fhf%ofCf“ ,É,í□CDOS ,ì COMMAND.COM ,Ä,ì 1 □s,ì'·,³,ìEÀŠE,Ä ,é 127
 •¶Žš,ð' ,í,É,çEÀ,èfAfNfVf}f“<L□t,ð,ç,,Ä•Ä,x,Ä,à,©,Ü,ç,Ü,¹,ñ□BfAfNfVf}f“<L□t,ì□#□~ ,í□d—
 v,Ä,í ,è,Ü,¹,ñ□BTLIB ,í□í,ÉŽÝ,ì“A'è,ì□#□~ ,Ä%%ZZZq,ðŽg,ç,Ü,·□B
 f,fWf...□[f<,ð'u,«Š ,í,é□ê□#□CCEã,çf,fWf...□[f<,ð□í□œ,μ,Ä,©,ç□V,μ,çf,fWf...□[f<,ð'Ç
 %%Ä,μ,Ü,·□B

1. □Å□%%,É,·,x,Ä,ìŠ□o'€□ì,ð□s,ç,Ü,·□B
2. ŽÝ,É,·,x,Ä,ì□í□œ'€□ì,ð□s,ç,Ü,·□B
3. □ÅCEã,É,·,x,Ä,ì'Ç%%Ä'€□ì,ð□s,ç,Ü,·□B

TLIB ,í□CŽw'è,³,é,¹/₂ftf@fCf<-¹/₄,©,çfhf%ofCfu-¹/₄□CfpfX-¹/₄□CŠg'£Žq,ì□î•ñ,ð,·,x,ÄŽæ,è□œ,ç
,¹/₂,à,ì,ðf,fWf...□[f<-¹/₄,Æ,μ,Ü,·□B

TLIB ,í□í,É“K□Ø,ÉfftfHf<fg,ð'z'è,·,é,±,Æ,É'□^Ó,μ,Ä,-
,³/₄,³,ç□B,¹/₂,Æ,í,í□Cfjfcf“fgfffBfCEfNfgfS,É ,éŠg'£Žq,³ .OBJ ,lf,fWf...□[f<,ð'Ç
%%Ä,·,é,É,í□Cf,fWf...□[f<-¹/₄,³/₄,¯,ðŽw'è,·,é,í,æ,□CfpfX-¹/₄,Æ .OBJ Šg'£Žq,í•K—v ,è,Ü,¹,ñ□B

ftf@fCf<-¹/₄,âf,fWf...□[f<-¹/₄,Éf□fCf<fhf□[fh,ðŽg—p,·,é,±,Æ,í,Ä,«,Ü,¹,ñ□B

ftf@fCf<-¹/₄,É + ,© - ,ªŠÜ,Ü,ê,Ä,ç,é□ê□#,É,í□Cftf@fCf<-¹/₄,ð“ñ□d^ø—p•,„í“□j,Ä'í,ñ,Ä,³/₄,³,ç□B

TLIB ,í 3 ,Ä,lfAfNfVf}f“<L□t (-□C+□C*) ,ð“FŽ¯ ,μ,Ü,·□B,±,ì<L□t,í'P“Æ,Ä□C ,é,ç,í 2
,Ä,ð'g,Y□#,í,¹,Ä□C□#CEv,Ä 5 ,Ä,ì^Ü,É,é“ @□ì,ðŽw'è,Ä,«,Ü,·□B2
,Ä,ì•¶Žš,ð'g,Y□#,í,¹,Ä“ @□ì,ðŽw'è,·,é□ê□#□C•¶Žš,ì□#□~ ,í“C^O,Ä,·□B^È%%º,ì\ ,
,ÉfAfNfVf}f“<L□t,Æ,»,ì<@“\,ðŽ!,μ,Ü,·□B

f,fWf...□[f<,ì'Ç%%Ä□æ,ð,Ü,³/₄'¶Y,μ,Ä,ç,È,çf%ofCfuf%ofŠ,É,·,é,Æ□C,±,lf%ofCfuf
%ofŠ,ª□V<K□ì□→,³,é,Ü,·□B

TLIB ,lfAfNfVf}f“<L□t

<L□t	- ¹ / ₄ 'O	<@“\
+	'Ç%%Ä	Žw'è,μ, ¹ / ₂ ftf@fCf<,ðf%ofCfuf%ofŠ,É'Ç %%Ä,·,é□Bftf@fCf<,lŠg'£Žq,ð□É—ª,·,é,Æ□CŠg'£Žq .OBJ ,ðŽw'è,μ, ¹ / ₂ ,à,ì,Æ,Y,É, ³ ,é,é□B,±,lftf@fCf<Ž©□g,ªf%ofCfuf %ofŠ□ìŠg'£Žq, ³ .LIB□j,ì□ê□#,í□C,»,ì't,ì,·,x,Ä,lf%ofCfuf %ofŠ,ªf^□[fQfbgf%ofCfuf%ofŠ,É'Ç%%Ä, ³ ,é,é 'Ç%%Ä, ³ ,é,é,fWf...□[f<, ³ ,Ä,É'¶Y,μ,Ä,ç,é□ê□#□Cf□fbfZ□[fW, ³ \ Ž!, ³ ,é□C□V,μ,çf,fWf...□[f<,ì'Ç%%Ä, ³ ,é,È,ç
-	í□œ	Žw'è,μ, ¹ / ₂ f,fWf...□[f<,ðf%ofCfuf%ofŠ,©,ç□í□œ,·,é□Bf%ofCfuf %ofŠ,Éf,fWf...□[f<,ª'¶Y,μ,È,ç□ê□#,lf□fbfZ□[fW, ³ \Ž!, ³ ,é,é □í□œ'€□ì,É,lf,fWf...□[f<- ¹ / ₄ ,ì,Y,ª•K—v□Bfhf %ofCfu,âŠg'£Žq,ðŠÜ,þŠ@'Sfpx- ¹ / ₄ ,ðŽw'è,μ,Ä,à,æ,ç,ª□Cf,fWf... □[f<- ¹ / ₄ ^ÈŠÖ,ì,·,x,Ä- ³ Ž<, ³ ,é,é

*	'Š□o	<p>Žw'è,μ,½ftf@fCf<,É'î%ož,·,éf,fWf...□[f<,ðf%ofCfuf %ofŠ,©,çfRfs□[,μ,Äftf@fCf<,ð□ì□¬,·,é□B,±,ìf,fWf... □[f<,ª'¶□Y,μ,É,ç□ê□#□Cf□bfZ□[fW,ª·\ Ž,³,ê□Cftf@fCf<,í□ì□¬,³,ê,É,ç□BŽw'è,μ,½ftf@fCf<,ª,·,Ä,É'¶□Y,·,é□ ê□#,í□ã□',«,³,ê,é</p> <p>f%ofCfuf%ofŠ"à,ìf,fWf...□[f<,ì-¼'O,ð'¼□Ú,í•í□X,Ä,«,È,ç□Bf,fWf... □[f<-¼,ð•í□X,·,é,É,í□CSY"¬,·,éf,fWf... □[f<,ì'S□o,¨,æ,Ñ□í□œ,ð□s,ç□C,±,ì'S□o,μ,Ä□ì□¬,μ,½ftf@fCf<,ì- ¼'O,ð•í□X,μ□C,±,é,ðf%ofCfuf%ofŠ,É□Ä,Ñ'Ç%oÄ,·,é</p>
-*	'Š□o,¨,æ,Ñ	Žw'è,μ,½f,fWf...□[f<,ð'î%ož,·,éftf@fCf<,ÉfRfs□[,μ,Ä□C
*-	□í□œ	,±,ê,ðf%ofCfuf%ofŠ,©,ç□í□œ,·,é
-+	'uŠ·	Žw'è,μ,½f,fWf...□[f<,ð'î%ož,·,éftf@fCf<,Ä'u,«Š·,ì,é

TLIB ,ì—á

TLIB ,ì,³,Ü,´,Ü,ÈŽg,ç•û,ðŽ|,·ŠÈ'P,ÈŽÀ—á,ð^È%º,ÉŽ|,µ,Ü,·B

—á 1

X.OBJ CY.OBJ CZ.OBJ ,ì 3 ,Â,ìf,fWf...[f<,Åf%ofCfuf%ofŠ MYLIB.LIB ,ði□¬,·,é,É,Í□CŽŸ,ì,æ,α,É“ü—Í,µ,Ü,·B

```
tlib mylib +x +y +z
```

—á 2

f%ofCfuf%ofŠ MYLIB.LIB ,ði□¬,µ□C,» ,ìfŠfXfg,à MYLIB.LST ,É□o—Í,·,é,É,Í□CŽŸ,ì,æ,α,É“ü—Í,µ,Ü,·B

```
tlib mylib +x +y +z, mylib.lst
```

—á 3

Šù'¶,ìf%ofCfuf%ofŠ CS.LIB ,ì CS.LST ,ÉfŠfXfg,ð□o—Í,·,é,É,Í□CŽŸ,ì,æ,α,É“ü—Í,µ,Ü,·B

```
tlib cs, cs.lst
```

—á 4

MYLIB.LIB ,©,ç□Cf,fWf...[f< X.OBJ ,ðV,µ,ç,à,ì,Æ'u,«Š·,ì□CA.OBJ ,ð'Ç%ºÁ,µ□CZ.OBJ ,ði□œ,·,é,É,Í□CŽŸ,ì,æ,α,É“ü—Í,µ,Ü,·B

```
tlib mylib -+x +a -z
```

—á 5

MYLIB.LIB ,©,çf,fWf...[f< Y.OBJ ,ð'Š□o,µ□CMYLIB.LST ,É,» ,ìfŠfXfg,ð□o—Í,·,é,É,Í□CŽŸ,ì,æ,α,É“ü—Í,µ,Ü,·B

```
tlib mylib *y, mylib.lst
```

—á 6

fCfXf]f“fXftf@fCf<,ðŽg,Á,Äf,fWf...[f< A.OBJ □CB.OBJ...G.OBJ ,Å□V,µ,çf%ofCfuf%ofŠ (ALPHA) ,ði□¬,·,éŽè□‡,ÍŽŸ,ì,Æ,“ ,è,Å,·B

1. ,Ü, ,□C^È%º,ì“à—e,ð<L□q,µ,½fefLfXfgftf@fCf< ALPHA.RSP ,ði□¬,µ,Ü,·B

```
+a.obj +b.obj +c.obj &  
+d.obj +e.obj +f.obj &  
+g.obj
```

2. ŽŸ,É□C^È%º,ÉŽ|,· TLIB fRf}f“fh,ðŽg,ç,Ü,·BfŠfXfgftf@fCf< ALPHA.LST ,ª□i□¬,³,è,Ü,·B

```
tlib alpha @alpha.rsp, alpha.lst
```

IMPLIB

IMPLIB ,ÍfCf“f|[]fgf%ofCfuf%ofŠ,đ̀ì[]¬,μ[]CIMPDEF ,Íf,fWf...[]f'è<`ftf@fCf<[]i.DEF
ftf@fCf<[]j,đ̀ì[]¬,μ,Û,·[]BfCf“f|[]fgf%ofCfuf%ofŠ,Æf,fWf...
[]f'è<`ftf@fCf<,Í[]Cf_fCfif~fbfNfŠf“fNf%ofCfuf%ofŠ (DLL) ,©,çfCf“f|
[]fg,·,éSÖ[]”,ì[]î•ň,đ̀fŠf“fj,É—^,!,Û,·[]B

TLIB

- Turbo C++ ,É,ÍRf}f“fhf%ofCf“fc[]f<,ÍŠÜ,Ü,ê,Ä,ç,Ü,¹,ñ[]B
TLIB ,íĈÊ[]X,ì .OBJ[]iflfufWfFfNfgf,fWf...[]f<[]jftf@fCf<,lf%ofCfuf%ofŠ,đŠÇ—
[],·,éft[][fefBfŠfefB,Ä,·[]Bf%ofCfuf%ofŠ,í[]CfifufWfFfNfgf,fWf...[]f<,i[]W[]‡,đ 1
,Ä,í'P^Ê,Æ,μ,Ä^μ,α•Ö—~,Éfc[][f<,Ä,·[]B

fCf“f|□[fgf%ofCfuf%ofŠ

fCf“f|□[fgf%ofCfuf%ofŠ,É,ÍfCEfR□[fh,ª, ,è,Ü,·□BŠefCEfR□[fh,É,Í DLL ,ì-¼'O,ª<L□q,ª,è□CfCf“f|
□[fg,ª,è,éŠÖ□”,ª'¶□Ý,·,é DLL “à,ì□é□Š,ªŽw'è,ª,è,Ä,ç,Ü,·□B,±,ìfCEfR□[fh,í TLINK ,Ü,½,Í IDE
fŠf“fj,É,æ,Ä,ÄfAfvfŠfP□[fvf#f“,ÉCE<□#ª,è□CDLL ŠÖ□”CEÄ,Ň□o,µ,ì%ođCE^,É•K—v,È□î•ň,đ
Windows ,É'ň<Ÿ,µ,Ü,·□BfCf“f|□[fgf%ofCfuf%ofŠ,ì□Cf,fWf...□[f<'è<`ftf@fCf<,ì IMPORTS
fZfNfvf#f“,ì^è•”,Ü,½,Í,·,x,Ä,Ä'u,«Š·,ì,é,±,Æ,ª,Ä,«,Ü,·□B

IMPDEF

IMPDEF ,í“ü—í,Æ,μ,Ä DLL -¼,ðŽæ,èž,ÝC□o—í,Æ,μ,Ä DLL ,æfGfNfXf|□[fg,; ,éŠÖ□” -
¼,ì<L□q,³,ê,½fGfNfXf|□[fgfZfNfVf†f“,ðŠÛ,þf,fWf...□[f<è<`ftf@fCf<,ð□ì□¬,μ,Û,·□B

MAKE ,É,Â,č,Ä

ŠÖ~A□€-Ú

MAKE.EXE ,lfRf}f“fhf
%ofCf“ ,lfvf□fWfFfNfgf}f□[fWffff□[fefBfŠfefB,Ä, ,è□Cfvf□fWfFfNfg,lfRf“fpfCf<,ÆfŠf“fN,lfTfCfNf
<,ðŠÇ—□,μ,Ü,·□BMAKE ,í□CCE³□XfRf“fpfCf<,ÆfŠf“fN,ÉCE<,Ñ•t,¯,ç,è,Ä,č,é,í,¯,Ä,í,È,-
□Cftf@fCf<,ì^É‘¶ŠÖCEW,ÉŠî,Ä,č,ÄfRf}f“fh,ðŽÄ□s,·,é”Ä—p,lf□[f<,Ä,·□BMAKE
,Ä,í□C□ÄEä,lfRf“fpfCf<^É□~ ,É•í□X,μ,½ftf@fCf<,ì,Ý,ðfRf“fpfCf<,·,é,±
,Æ,É,æ,è□Cfvf□fWfFfNfg,ð,·,î,â,□□~ ,Ä,« ,é,æ,π,É,μ,Ü,·□B,³,ç,É□C□□~Žž,ì“ÄŽè,È□ó<μ,É‘î,·,é
MAKE ,É,æ,é‘í^•ú-@,ðŽw’è,·,éf<□[f<,ð□Ý’è,·,é,±,Æ,à,Ä,« ,Ü,·□B

MAKE ,İŠi’b

MAKE ,í,» ,iffftfHf<fg□Ý’è,ðŽg,Ä,Ä□□~ ,μ,½f<□[f<,ð—p,č
,Ä□Cfvf□fWfFfNfg,Äftf@fCf<,ðfRf“fpfCf<,·,é•ú-
@,ðCE^’è,μ,Ü,·□B,½,Æ,î,í□CfffofbfO□î•ñ,Äfvf□fWfFfNfg,ð□□~ ,μ,Ä .OBJ
ftf@fCf<,ðfRf“fpfCf<,·,éŽžŠú,ðŽw’è,Ä,« ,é,ì,í□Cf□[fXftf@fCf<,lf^fCfēfXf^f“fv,ª .OBJ
ftf@fCf<Ž©‘î,î,à,î,æ,è,à□V,μ,č□è□±,É,©,¯,ç,è,Ü,·□Bf,fWf...□[f<,ð<-
□\$“î,ÉfRf“fpfCf<,·,é,É,í□CTOUCH.EXE ,ðŽg,Ä,Äf,fWf...□[f<,ì□]’@ftf@fCf<,ì 1
,Ä,lf^fCfēfXf^f“fv,ð•í□X,μ,Ü,·□B

fefLfXfgE`Ž@ ,lf□fCfNftf@fCf<,Å 2 Ží—p,lf<□[f<□i-¾Ží“lf<□[f<,Æ^Ä-
Ü,lf<□[f<□],ð□□~ ,μ,Ä□CMAKE ,Éfvf□fWfFfNfg,Ä,lf@fCf<,ì^μ,č•ú,ðŽwŽí,μ,Ü,·□BMAKE
,í□Ý’è,³,è,½f<□[f<,ð—p,č,Ä□Cftf@fCf<□ifZfbfg□j,ÉfRf}f“fh,ðŽÄ□s,·,x,« ,©,Ç,π
,©,ðCE^ ,ß,Ü,·□BfRf}f“fh,í□C’É□í,lf@fCf<fZfbfg,lfRf“fpfCf<,âfŠf“fN,ð MAKE
,É‘î,μ,ÄŽwŽí,·,é,à,î,Ä,·,ª□CflfyfCE□[fefBf“fofVfXfefE,ì,Ü,Æ,ñ,Ç,·,x,Ä,lfRf}f“fh,ðŽw’è,Ä,« ,Ü,·□B
MAKE ,ì^è”É“î,È□\•¶,İŽÝ,ì,Æ,¯,è,Ä,·□B

MAKE [<flfvfVf#f“> ...] [<f^□[fQfbfg> [<f^□[fQfbfg> ...]]

<flfvfVf#f“>

MAKE ,ì“ @□ì,ð□\$Eä,·,é MAKE flfvfVf#f“,Ä, é

<f^□[fQfbfg>

f□fCfNftf@fCf<,É<L□q,³,è,½f^□[fQfbfg,ì-¼’O□B,±,è,ð□□~î□Ü,É,·,é

MAKE

fRf}f“fh□CflfvfVf#f“^ø□“□Cf^□[fQfbfg^ø□“ ,í,» ,é,¼,éfXfy□[fX,Ä<æ□ø,ç,È,¯,è,î,È,è,Ü,¹,ñ□Bf^□[
fQfbfg,ìŽw’è,Ä•;□“ ,lf@fCf<,ðŽwŽí,·,é□Ü,É,í□C* ,â ? ,ì,æ,π,Éf□fCf<fhfj□[fh•¶Žš,ðŽg,π,±,Æ,ª
%oÄ“\,Ä,·□B,½,Æ,î,í□CMAKE ,lfRf}f“fh%ofCf“fwf<fv,ð•\Ží,·,é,É,í□CMAKE -? ,Æ“ü—î,μ,Ü,·□B

MAKE ,lffftfHf<fg,l"®

MAKE fRf}f"fh,đŽÀs,·,é,ÆCMAKE ,lffftfHf<fg,lf<[f<,a<Lq,³,ê,Ä,ç,é BUILTINS.MAK ,Æ,ç ,xftf@fCf<,đ'T,μ,Û,·lffftfHf<fgf<[f<,đ-³CEø,É,·,é,É,ÍC-r flfvVf#f",đŽw'è,μ,Û,·jBMAKE ,Í,± ,lftf@fCf<,đCÅ%o,ÉfJfCf"fgfffBfCfNfgfŠ,Å'T,μCŽY,É MAKE.EXE ,aŠi"[,³,ê,Ä,ç ,éfffBfCfNfgfŠ,Å'T,μ,Û,·BBUILTINS.MAK ,đf[fh,μ,½CEãCMAKE ,lftfCf"fgfffBfCfNfgfŠ,Å MAKEFILE ,Û,½,Í MAKEFILE.MAK ,Æ,ç,xftf@fCf<,đ'T,μ,Û,·iMAKEFILE ^ÈŠO,lftf@fCf<,đŽw'è,·,é,É,ÍC-f flfvVf#f",đŽg— p,μ,Û,·jB,Ç,lftf@fCf<,àCE©,Ä,©,ç,É,çê#É,ÍGf%o[fbfZ[fW,a·Ži,³,ê,Û,·B fCfNftf@fCf<,đf[fh,·,é,ÆCMAKE ,íÅ%o ,lf^[]fQbfg,ì[]'®ftf@fCf<,lf^fCf€xf^f"fv,đ'²,x,ÄCfCfNftf@fCf<,ìÅ%o ,É<Lq,³,ê,½f^[]fQbfg,¾,¯,đ[]-,μ,æ,x ,Æ,μ,Û,·B[]'®ftf@fCf<,l·ù,af^[]fQbfgftf@fCf<,æ,è,àV,μ,çê#CMAKE ,lRf}f"fh,đŽÀs,μ,Äf^[]fQbfg,đXV,μ,Û,·B []Å%o,lf^[]fQbfg,ì[]'®ftf@fCf<,l 1 ,Ä,afCfNftf@fCf<,l·È,ì%óŠ,Äf^[]fQbfg,Æ,μ,ÄŽg— p,³,ê,Ä,ç,éê#CMAKE ,Í,»,lf^[]fQbfg,ì^'ŠÖEW,đ'²,x,Ä,»,é,đ[]-,μ,Ä,©,çÅ%o ,lf^[]fQbfg,đ[]-,μ,Û,·B,±,ì~A½"½%ž,đCCE<#³,è,½^È'ŠÖEW,Æ,ç,ç,Û,·B [][]-^—,Å%½,©,ž "s,·,é,ÆCMAKE ,l[]-t,lf^[]fQbfgftf@fCf<,đíœ,μ,Û,·B[]-,ž, "s,μ,½ê#É MAKE ,Éf^[]fQbfg,đíœ,³,¹,É,ç,æ,x,É,·,é,É,ÍC.precious Žw—ß,đŽg,ç,Û,·B MAKE fRf}f"fh,l"CsEã,É MAKE ,đ'âŽ~,³,¹,é,É,ÍCkCtrl+kBBreakl,Û,½,ÍkCtrl+kC,l,đ %oÿ,μ,Û,·B

BUILTINS.MAK

```
BUILTINS.MAK ftf@fCf<,É,íCMAKE  
,af@fCfNftf@fCf<,lf^@fQfbfg,ð@i@-@,·,é,Æ,«,ÉŽg,¤•W@€“l,Èj<@f<,âf}fNf@,a<L@q,³,ê,Ü,·BMAKE  
,É BUILTINS.MAK ,ð-³Ž<,³,¹,é,É,íC-r MAKE f|fv|vftf“ ,ðŽg,†,Ü,·B
```

```
BUILTINS.MAK ,jffftfHf<fgfefLfXfg,ðŽŸ,ÉŽl,µ,Ü,·B
```

```
#  
# Borland C++ - (C) Copyright 1993 by Borland International  
#
```

```
# default is to target 16BIT  
# pass -DWIN32 to make to target 32BIT
```

```
!if !$d(WIN32)  
CC      = bcc  
RC      = brcc  
AS      = tasm  
!else  
CC      = bcc32  
RC      = brcc32  
AS      = tasm32  
!endif  
.asm.obj:  
    $(AS) $(AFLAGS) $&.asm  
.c.exe:  
    $(CC) $(CFLAGS) $&.c  
.c.obj:  
    $(CC) $(CFLAGS) /c $&.c  
.cpp.exe:  
    $(CC) $(CFLAGS) $&.cpp  
.cpp.obj:  
    $(CC) $(CPPFLAGS) /c $&.cpp  
.rc.res:  
    $(RC) $(RFLAGS) /r $&  
  
.SUFFIXES: .exe .obj .asm .c .res .rc  
  
!if !$d(BCEXAMPLEDIR)  
BCEXAMPLEDIR = $(MAKEDIR)\..\EXAMPLES  
!endif
```

Makefile

CC = gcc
CFLAGS = -g -Wall -std=c99
LDFLAGS =
SRCS = main.c
OBJS = \$(SRCS:.c=.o)
EXEC = \$(SRCS:.c=.exe)

all: \$(EXEC)
\$(EXEC): \$(OBJS)
\$(OBJS): \$(SRCS)
clean: rm -f \$(OBJS) \$(EXEC)

- `CC = gcc`
- `CFLAGS = -g -Wall -std=c99`
- `LDFLAGS =`
- `SRCS = main.c`
- `OBJS = $(SRCS:.c=.o)`
- `EXEC = $(SRCS:.c=.exe)`

fVf“f{fŠfbfNf^[]fQfbfg

fVf“f{fŠfbfNf^[]fQfbfg,đŽg,α,Æ[]CMAKE ,Éf[]fCfNftf@fCf<,ì•;[]”,ìf^[]fQfbfg,đ[][]-,³,¹,é,±,Æ,^a,Å,«,Ü,·[]BfVf“f{fŠfbfNf^[]fQfbfg,đŽw’è,·,é,Æ[]C[][]-,·,é,·,×,Ä,ìf^[]fQfbfg,đ^É’¶SÖCEW[]s,É<L[]q,Å,«,Ü,·[]BfVf“f{fŠfbfNf^[]fQfbfg,ÍŠî-{}“l,É[]CCE<[]±,³,é,¹/₂^É’¶SÖCEW,đŽg—p,μ,Ä•;[]”,ìf^[]fQfbfg,đ[][]-,μ,Ü,·[]B,¹/₂,Æ,ì,ì[]CŽÿ,ìf[]fCfNftf@fCf<,í[]CfVf“f{fŠfbfNf^[]fQfbfg AllFiles ,đŽg—p,μ,Ä FILE1.EXE ,Æ FILE2.EXE ,ì—¹/₄•û,đ[][]-,μ,Ü,·[]B

```
AllFiles: file1.exe file2.exe      #,±,ì AllFiles ,É,ìfRf}f“fh,a,È,ç,±,Æ,É’[]^Ó
file1.exe: file1.obj
           bcc32 file1.obj
file2.exe: file2.obj
           bcc32 file2.obj
```

fVf“f{fŠfbfNf^[]fQfbfg,ì<K’¥

- fVf“f{fŠfbfNf^[]fQfbfg,đŽg,α[]Û,É,í^È%°°,ì<K’¥,É[],ç,Ü,·[]B
- fVf“f{fŠfbfNf^[]fQfbfg,ì[]s,ÉfRf}f“fhf%°fCf”,í“ü—í,Å,«,È,ç
- fVf“f{fŠfbfNf^[]fQfbfg,É,ìftfj[]fN,È-¹/₄’O,đŽw’è,·,é[]BfjfCEf“fgfffBfCEfNfgfŠ,É, ,éftf@fCf<-¹/₄,đŽw’è,μ,Ä,í,ç, ,È,ç
- fVf“f{fŠfbfNf^[]fQfbfg,ì-¹/₄’O,ìfìfyfCE[]fefBf“fOfVfXfef€,ìftf@fCf<-¹/₂-¹/₄<K’¥,ÉŠî,Ä,ç,ÄŽw’è,·,é

-fftf@fCf<-¼ MAKEFILE ,ì,©,í,è,Éftf@fCf<-¼,Ü,½,íftf@fCf<-¼ .MAK ,ðŽg,æ□i-f ,ìCEä,è,ìfXfy□[fX,í□É—²%Å"□j

-h ,Ü,½,í -? MAKE fìfvfVf†f" ,ð•\ Žì, ,é□BfftfHf<fg□Ý'è,í□□ÅCEä,É□u+□v<L□†,ð•t, ,Ä•Žì,³,è,é

-lfffBfCEfNfgfŠ fCf" fNf<□[fhftf@fCf<,ð□C,Ü, ,ffCEf"fgfffBfCEfNfgfŠ,Å□CŽŸ,É,± ,ìfvfVf†f" ,ÄŽw'è,³,è,½fffBfCEfNfgfŠ,Ä'T,·

-i f□fCfNftf@fCf<,©,çŽÀ□s,³,è,é,·,x,Ä,ìfvf□fOf%of€,ì□l—¹fXfe□[f^fX,ð-³Ž<,μ,Å□ì□-□^—□,ð'±□s,·,é

-K MAKE ,²□ì□-,μ,½fef" fìf%ofŠftf@fCf<,ð•Ù'¶,·,é□iMAKE ,í'É□ífef" fìf %ofŠftf@fCf<,ð□í□œ,·,é□j

-m MAKE ,²ftf@fCf<,ð□^—□,·,é,²,Æ,É,»,ìf^fCf€fXf^f"fv,ð•\Žì,·,é

-N f}fCfNf□f†fg,ì NMAKE ,ì,æ,æ,É MAKE ,ðŽÀ□s,·,é

-n MAKE ,ìRf}f"fh,ì•\ Žì,¾,□s,ç□CŽÀ□s,ì,μ,È,ç□Bf□fCfNftf@fCf<,ìffofbfO,É•Ö—~

-p f□fCfNftf@fCf<,ìŽÀ□s'O,Éf}fNf□'è<,Æ^Ä-Ù,ìf<□[f<,ð,·,x,Ä•Žì,·,é

-q f^□[fQfbfg,²□X□V,³,è,Ä,ç,é,È,ç,î 0 ,ð•Ô,μ□C,»,é^ÈŠO,ì□è□†,í 0 ^ÈŠO,ì'l,ð•Ô,·□ifofbf`ftf@fCf<,ÄŽg—p□j

-r BUILTINS.MAK ,Ä'è<,³,è,Ä,ç,é,·,x,Ä,ìf<□[f<,ð-³Ž<,·,é

-S fRf}f"fh,ìŽÀ□s't,É MAKER ,ðf□f,fŠ,©,çfXf□fbfvfAfEfg,μ□Cf□f,fŠ,ìf□[fo□[fwfbfh,ðCE , ,ç,μ,Ä'â,«,Èf ,fWf...□[f<,ìRf"fpfCf<,ð%Å"\,É,·,é□B,±,ìfvfVf†f" ,í MAKE ,Ä,ì-³CE∅

-s fRf}f"fh,ì%œ-È•\Žì,ð—}□s,·,é

-Uf}fNf□ f}fNf□'è<,ð-ç'è<,É,·,é

-W Žw'è,³,è,Ä,ç,é•¶Žš—ñfvfVf†f" ^ÈŠO,ìfvfVf†f" ,ð MAKE.EXE ,É□',«□ž,Ý□C,±,è,ðfftfHf<fg,Æ,·,é□ifŠfAf<f,□[fh"Å MAKER.EXE ,ì,Ý□j

ffftfHf<fg MAKE flfvfVf#f“ ,ìŸ’è

-W flfvfVf#f“ ,ðŽg,æ,ÆCMAKE
,lffftfHf<fgflfvfVf#f“ ,ðŸ’è,À,«,Ü,·BffftfHf<fgflfvfVf#f“ ,ðŸ’è,·,é,É,ÍCŽŸ,ì\•Ÿ,ðŽw’è,µ,Ü,·B

make [-flfvfVf#f“ [-] ...] -W

,½,Æ,ì,îCMAKE -m -W ,ì,æ,æ,É“ü—í,·,é,ÆCffftfHf<fg,Å -m flfvfVf#f“ ,æflf“ ,É,È,è,Ü,·B,±
,è,ÅCMAKE ,lftf@fCf<,lf^fCf€fXf^f“fv,ð•K, ,•\Žì,³,¹,Ü,·B-W flfvfVf#f“ ,ðŽg,æ,ÆCMAKE
,É,æ,è MAKER.EXE ,Ö,ì•îX,ì,«Ž,Ÿ,ð<B,éffbfZ[fW,ª•\Žì,³,è,Ü,·BY ,Æ“ü—
í,·,é,ÆC[V,µ,çffftfHf<fg,ðŽó,·t,·,Ü,·BffftfHf<fg,Åflf“ ,É,È,À,Ä,ç
,éflfvfVf#f“ ,ðflft,É,·,é,É,ÍCflfvfVf#f“ ,ìÆä,ë,ÉfnfCftf“ ,ðŽw’è,µ,Ü,·B,½,Æ,ì,îC-m
flfvfVf#f“ ,ì•îX,ðÆ³,É-ß,·,É,ÍCŽŸ,ì,æ,æ,É“ü—í,µ,Ü,·B

MAKE -m- -W

- -W flfvfVf#f“ ,ìC^È%º,ì MAKE flfvfVf#f“ ,Æ^è,É,ÍŽg—p,À,«,Ü,¹,ñB

-Df}fNf -Df}fNf=•ŸŽš—ñ

-dffBfCfNfgfŠ -Ufvf“f{f<

-fftf@fCf<-¼ -? ,Ü,½,í -h

-lffBfCfNfgfŠ

’^Ó: -DOS ,ì SHARE fvfOvf%fv,æf[fh,³,è,Ä,ç,é,Æ,«,É W flfvfVf#f“ ,ðŽg, ,æ
,Æ,·,é,ÆCMAKE ,É,æ,éffbfZ[fW[uFatal: unable to open file MAKER.EXE[v,ª•\
Žì,³,è,Ü,·B

TOUCH ,ižg,č•û

TOUCH.EXE ,íCfVfXfef€ ,ìCE»Ÿ ,ì“úŽž,đ”½%of ,•,é,æ,ı
,Éftf@fCf<,lf^fCf€fXf^f“fv,đXV,μ,Û,•B

f[fXftf@fCf<,đ•íX,μ,Ä,ç,È,çéê†,Ä,àCf^ [fQfbfgftf@fCf<,đÄfRf“fpfCf<,âÄ\‘z ,•,é•K—
v,ª ,ééê†,ª ,è,Û,•B,±,é,É’í^ ,•,é•û-@,ì 1 ,Ä,Æ,μ,ÄCTOUCH ft [fefBfSfefB,ª—p^Ó,ª,é,Ä,ç
,Û,•B,±,é,É,æ,èCf^ [fQfbfg,ì 1
,Ä,Û,½,í•;” ,ì]’@ftf@fCf<,lf^fCf€fXf^f“fv,đXV,Ä,« ,Û,•B]i 1 ,Ä,Û,½,í•;” ,ì]ftf@fCf<,đ
TOUCH ^— ,•,é,É,íCfRf}f“fhf%ofCf“ ,ÉŽŸ,ì,æ,ı,É“ü—í,μ,Û,•B

touch [options] filename [filename...]

TOUCH ,í 32 frfbfg ,ìžÀ[sCE`ž@ftf@fCf<,Ä ,èCf’ ,çftf@fCf<-¼,đžó,ˆ•t,ˆ ,Û,•B,Û,½C*
,ˆ ,æ,Ń ? ,lfCf<fhf [fh•Ÿš,đšÛ ,bftf@fCf<-¼,đžg—
p,μ,ÄC•;” ,lf@fCf<,đ“žž,ÉuTOUCHv^— ,Ä,« ,Û,•B

’^Ó: TOUCH ,đžg,ıÛ,É,íCfVfXfef€ ,ì“à’ fNf]fbfN,ª³ ,μ,Ÿ’è,ª,é,Ä,ç,é,±,Æ,đšm”F,μ,Û,•B

TOUCH flfvfVf†f“

TOUCHE.EXE ,ÄTf [[fg,ª,é,éRf}f“fhf%ofCf“flfvfVf†f“ ,í^È%º,ì,Æ,ˆ ,è,Ä,•B

flfvfVf†f“	à-¾
-dCEž-“ú-”N	ftf@fCf<,ì“ú•t,đžw’è,μ,½“ú•t,ÉŸ’è,•,é
-fftf@fCf<-¼	ftf@fCf<,lf^fCf€fXf^f“fv,đŸ’è,μ,Äuftf@fCf<-¼v,ì,à,ì,É ,í,¹,é
-h	fwf<fví•ň,đ•ž!,•,éiflfvfVf†f“ ,Û,½,lf@fCf<-¼,È,μ,Ä TOUCH ,đ“ü— í,•,ééê†,Æ”ˆ ,Ÿj
-tžž:•ª:•b	ftf@fCf<,ìžžšÔ,đžw’è,μ,½žžšÔ,ÉŸ’è,•,é
-v	TOUCH ,đžÀ[s,μ,½seftf@fCf<,đÛx,É•ž!,•,é

-¾Ž!“lf<[]f<,Æ^Ã-Ù,lf<[]f<

f[]CfNftf@fCf<,lf^[]fQfbfg,ì[]-•ù-@,É,Â,ç,Ä MAKE ,É'í,μ,Ä-½-β,ð-^,ì,é-¾Ž!“lf<[]f<,Æ^Ã-Ù,lf<[]f<,íC^è”É,É^É%º,ì,æ,α,É'è<`³,ê,Ü,·[]B

-¾Ž!“lf<[]f<,íC“Á'è,ìftf@fCf<,É'í,·,é-½-β,Å, ,é

^Ã-Ù,lf<[]f<,íC-¾Ž!“lf<[]f<,è,É,çftf@fCf<,É'í,·,é^è”É“ì,É-½-β,Å, ,é

f<[]f<,ì^è”É€`Ž®,íŽÿ,ì,Æ,“,è,Å,·[]B

^È'¶ŠÖEW[]s
fRf}f“fh[]s

^È'¶ŠÖEW[]s,Å,í-¾Ž!“lf<[]f<,Æ^Ã-Ù,lf<[]f<,Å^Ù,È,é[]•¶,ªŽg—p,³,ê,Ü,·,ª[]CfRf}f“fhf%ofCf“[]\
•¶,í,ç,è,ç,lf<[]f<,Å,à““,¶,Å,·[]B

MAKE ,í 1 ,Å,lf^[]fQfbfg,É'í,μ,Ä•í[]”,ì^È'¶ŠÖEW[]s,ðTf|[]f[]g,μ[]C1
,Å,lf^[]fQfbfg,É•í[]”,lfRf}f“fhf%ofCf“,ðŽw'è,Å,«,Ü,·[]B,½,¾,μ[]CŠÖ~A,·,éfRf}f“fhf%ofCf“,í 1
,Å,ì^È'¶ŠÖEW[]s,É,μ,©Žw'è,Å,«,Ü,¹,ñ[]B,½,Æ,ì,í[]CŽÿ,ì,æ,α,É,È,è,Ü,·[]B

Target1: dependent1 dep2 dep3 dep4 dep5
Target1: dep6 dep7 dep8
bcc32 -c \$**

-¾Ž;“lf<[f<,i\•¶

-¾Ž;“lf<[f<,i\•¶CMAKE ,ª‘Á’è,lf^[]fQfbfg,ð[]-.,éžž“_ ,Á[] ,í,È,¯,ê,ì,È,ç,È,ç-½—
ß,ðžw’è,µ,Û,·B-¾Ž;“lf<[f<,Á,íC1 ,Á,Û,½,í 2 ,Á,lfRf[]“ ,íCã,è,É 1
,Á,Û,½,í•;[]“ ,lf^[]fQfbfg,ðžw’è,µ,Û,·B1 ,Á,lfRf[]“ ,íC[]i1 ,Á,Û,½,í•;[]“ ,ìj^[]fQfbfg,É’í,µ,Ä
1 ,Á,lf<[f<,ª<L[]q,³,è,é,±,Æ,ðž; ,µ,Û,·B2 ,Á,lfRf[]“ ,íC[]i1 ,Á,Û,½,í•;[]“ ,ìj^[]fQfbfg,É’í,µ,Ä 2
,Á^È[]ã,lf<[f<,ª<L[]q,³,è,é,±,Æ,ðž; ,µ,Û,·B

-¾Ž;“lf<[f<,i\•¶,íŽÿ,ì,Æ,¯,è,Á,·B

```
target [<f^[]fQfbfg> ...]:[:][{fpx}] [<[]’@ftf@fCf<> ...]  
[<fRf}f“fh>]
```

```
<f^[]fQfbfg>  
ftf@fCf<,í-  
¼‘O,ÆSg’£žq,ðžw’è,.,éif^[]fQfbfg,lf[]fCfNftf@fCf<,ì[]s,ì[]æª,ÉfXfy[]fX,âf^fu,ð’u,©,  
,Éžw’è[]B•;[]“ ,lf^[]fQfbfg,ðžw’è,.,é,É,íC,»,è,¼,è,lf^[]fQfbfg-  
¼,ðfXfy[]fX,Û,½,lf^fu,Á<æ[]Ø,é[]B,Û,½[]C-  
¾Ž;“lf<[f<,lf^[]fQfbfg,í^É’u,ÉCÉ,è•O,µ“¯,¶f^[]fQfbfg-¼,ðžg—p,µ,Ä,í,ç,¯,È,ç
```

```
{fpx}  
MAKE  
,É[]’@ftf@fCf<,ðC@,Á,¯,é,½,ß,ìCÿ[]ð[]æ,ðžwž; ,.éfffBfCfNfgfš,lfšfXfg[]B•;[]“ ,lfffBfCf  
Nfgfš,íC,»,è,¼,è,ðfZf~fRf[]“ ,Á<æ[]Ø,è[]Cfpxžw’è,ì’S’ì,ð’tfjfbfR,Á’í,p
```

```
<[]’@ftf@fCf<>  
[]i1 ,Á,Û,½,í•;[]“ ,ìjftf@fCf<,Á[]CMAKE  
,ª,»,lf^fCf[]fXf^f“fv,ðf^fFfbfN,µ,Áf^[]fQfbfg,æ,è[]V,µ,ç,©,Ç,ª  
,©,ð², x, é[]B[]’@ftf@fCf<,í‘O,É,í‘K, ,fXfy[]fX,ð’u,-  
[]B[]’@ftf@fCf<,ª[]fCfNftf@fCf<“à,ì‘É,í%O[]š,Áf^[]fQfbfg,Æ,µ,Á<L[]q,³,è,Ä,ç  
,é[]é[]#[]CMAKE  
,í,»,lf^[]fQfbfg,ð[]X[]V,Û,½,í[]- ,µ,Ä,©,ç[]CÉ³,lf^[]fQfbfg,Á[]’@ftf@fCf<,ðžg—  
p,.,é[]i,±,è,íC[]u[]C[]# ,³,è,½^É’¶šO[]EW[]v,Æ,ç,ª[]j
```

```
<fRf}f“fh>  
flfyf[][]f[]Bf“fofVfXfefÉ,ì[]i1 ,Á,Û,½,í•;[]“ ,ìj”C^Ó,lfRf}f“fh,Á, ,é[]BfRf}f“fhf%ofCf“ ,í-  
,É,Æ,à 1 ,Á,lfXfy[]fX,Û,½,lf^fu,Ážš%°°,°^—[]µ,É,¯,è,ì,È,ç,È,ç[]Bžš%°°,°^—  
[],ð[]s,í,È,ç,Æ[]Cf^[]fQfbfg,Æ,µ,Ä  
%°ðžß,³,è,Á,µ,Û,ª[]B•;[]“ ,lfRf}f“fh,ðžw’è,.,é,É,íC,»,è,¼,è,ðfXfy[]fX,Á<æ[]Ø,é
```

^É’¶šO[]EW[]s,Û,½,lfRf}f“fhf%ofCf“ ,ªžÿ,ì[]s,É’±,Æ,«,íCžÿ,ì,æ,ª,É[]s-- ,É%~<L[]t (\)
,ðžw’è,µ,Û,·B

```
MYSOURCE.EXE: FILE1.OBJ\ #[]’@šO[]EW[]s  
FILE3.OBJ #[]’@šO[]EW[]s,ì’±,«  
bcc32 file1.obj file3.obj #fRf}f“fhf%ofCf“
```

•;[]“ ,lf<[f<,ðž; ,Á 1 ,Á,lf^[]fQfbfg

1 ,Á,lf^[]fQfbfg,É•;[]“ ,ì-¾Ž;“lf<[f<,ðžw’è,Á,«,Û,·B•;[]“ ,ì-
¾Ž;“lf<[f<,ðžw’è,.,é,É,íCf^[]fQfbfg-¼,íCã,è,É 2 ,Á,lfRf[]“ ::
,ð•t,¯,Û,·Bf^[]fQfbfg,É•;[]“ ,lf<[f<,ÆfRf}f“fh,ðžw’è,.,é•ù-@,ì—á,ðžÿ,Éž; ,µ,Û,·B

```
.cpp.obj :  
bcc32 -c -ncobj $<
```

```
.asm.obj:
    tasm /mx $<, asmobj\

mylib.lib :: f1.obj f2.obj    #•i□",)f<□[f<,í 2 ,Â,)fRf□f“,ĂŽw'è,,:é
    echo Adding C files
    tlib mylib -+cobjf1 -+cobjf2

mylib.lib :: f3.obj f4.obj
    echo Adding ASM files
    tlib mylib -+asmobjf3 -+asmobjf4
```

^Ã-Ù,ìf<[]f<,ì[]\•¶

^Ã-Ù,ìf<[]f<,ì[]C“Á`è,ìftf@fCf<Šg'£Žq,Á[]—¹,.éftf@fCf<,đ MAKE ,É,æ,è[]i[]-,.,é•û-@,É,Á,ç, ,Á,ì`è“É“l,Éf<[]f<,đŽw'è,μ,Û,·[]B^Ã-Ù,ìf<[]f<,ìfpx,Û,½,ìfsfŠfìfh,ÁŽn,Û,è,Û,·[]BŽă,È[]— v'f,ìfsfŠfìfh,Áæ[]Ø,Á,½ftf@fCf<Šg'£Žq,Á,·[]B[]Á[]%,ìŠg'£Žq,ì[]'®ftf@fCf<,ì,à,ì,Á[]C2 “Ö- Û,ìŠg'£Žq,ìf^[]fQfbfgftf@fCf<,ì,à,ì,Á,·[]B

^Ã-Ù,ì[]'®ftf@fCf<,af^[]fQfbfg,æ,èCÉ,É,Á,Á,ç,é,©[]C,Û,½,í¶[]Ý,μ,Á,ç,È,ç[]è[]#[]CMAKE ,ì,±,ìf<[]f<,ÉŠÖ~A,μ,½fRf}f“fh,đŽÁ[]s,μ,Û,·[]BMAKE ,í^Ã-Ù,ì[]'®ftf@fCf<,æ,è,à'O,É-¾Žì“l,È[]'®ftf@fCf<,đ[]X[]V,μ,Û,·[]B

^Ã-Ù,ìf<[]f<,ìŠì-{}“l,È[]\•¶,ìŽÿ,ì,Æ,“,è,Á,·[]B

```
[[source_dir]].source_ext [[target_dir]].target_ext:  
[commands]
```

source_dir

```
[]'®ftf@fCf<,ăŠì“l,¾,è,Á,ç,é[]i  
,Á,Û,½,ì•;[]",ì[]ffBfCfNfgfŠ,đŽw'è,.,é[]B•;[]",ìffBfCfNfgfŠ,đŽw'è,.,é[]è[]#,ìfZf~fRf[]“ ,Á<  
æ[]Ø,é
```

.source_ext

```
[]'®ftf@fCf<-¾,ìŠg'£Žq,đŽw'è,.,é
```

target_dir

```
MAKE ,af^[]fQfbfgftf@fCf<,đŠì“l,.,éffBfCfNfgfŠ,đŽw'è,.,é[]B^Ã-Ù,ìf<[]f<,ì[]C,±  
,ìffBfCfNfgfŠ,É, ,éf^[]fQfbfg,É“l,μ,Á,ì,Ý“K—p,¾,è,é[]Btarget_dir  
,đŽw'è,μ,È,ç[]è[]#[]C,ç,ìffBfCfNfgfŠ,ìf^[]fQfbfg,É,à^Ã-Ù,ìf<[]f<,ă“K—p,¾,è,é
```

.target_ext

```
f^[]fQfbfgftf@fCf<-¾,ìŠg'£Žq,đŽw'è,.,é[]Bf}fNf[],đŽg—p,Á,«.,é
```

:(fRf[]“)

```
[]'®ŠÖCfW[]s,ì[]i,è,đŽì,.
```

commands

```
fìfyfCf[]fCfBf“fOfvXfCfÉ,ì[]i ,Á,Û,½,ì•;[]",ì[]fRf}f“fh[]BfRf}f“fhf%[]Cf“ ,í 1  
,Á,ìfXfy[]fX,©f^fu,ÁŽš%[]°,°,é[]B,±,ìŽš%[]°,°,đ[]s,í,É,ç,Æ[]Cf^[]fQfbfg,Æ,μ,Á  
%[]đŽš,¾,è,Á,μ,Û,æ
```

2 ,Á,ì^Ã-Ù,ìf<[]f<,ă 1

,Á,ìf^[]fQfbfgŠg'£Žq,É`è'v,.,é, ,é,ç,à[]'®ftf@fCf<,ă¶[]Ý,μ,È,ç[]è[]#[]CMAKE ,ì[]'®ftf@fCf<,ìŠg'£Žq,ă .SUFFIXES fŠfXfg,Á[]æ,É<L[]q,¾,è,Á,ç,é^Ã-Ù,ìf<[]f<,©,çŽg—p,μ,Û,·[]B

^Ã-Ù,ìfRf}f“fh,đŽg—p,.,é-¾Žì“ìf<[]f<

-¾Žì“ìf<[]f<,ìf^[]fQfbfg,ìfRf}f“fh[]s,đ^Ã-Ù,ìf<[]f<,©,çŽæ“¾,Á,«,Û,·[]B^Ã-Ù,ìf<[]f<,ì— á,Æ[]CfRf}f“fh[]s,ì,È,ç-¾Žì“ìf<[]f<,ì—á,đŽÿ,ÉŽì,μ,Û,·[]B

.c.obj:

```
bcc32 -c $< #,±,ìfRf}f“fh,ăŽg—p,.,éf}fNf[] $< ,É,Á,ç,Á,í  
#[]uffftfHf<fg,ì MAKE f}fNf[]v,đŽQ[]Æ
```

```
myprog.obj: #,±,ì-¾Žì“ìf<[]f<,ìfRf}f“fh bcc -c myprog.c ,đŽg—p,.,é
```

^Ã-Ù,ìf<[]f<,ìfRf}f“fh,í MYPROG.C ,đfRf“fpxfCf<,.,é,æ,æ MAKE ,ÉŽwŽì,μ,Û,·[]Bf}fNf[] \$< ,ì-¾'O myprog.obj ,đ myprog.c ,Á'u,«Š,ì,Û,·[]B

fRf}f"fh,ì\•¶

fRf}f"fh,ì-¾Ž!“lf<□[f<,Ü,½,Í^Ã-Ü,lf<□[f<,ì¼œã,ÉŽw'è,Á,«,Ü,·,ª□C
%ü□sœã,ÉfXfy□[fX,Ü,½,lf^fu,ðŽw'è,µ,Á,©,çšŽn,µ,È,¯,ê,Í,È,è,Ü,¹,ñ□B

fRf}f"fh,É,lfifyfœ□[fefBf"fofvfXfef€
,"C^Ó,lfRf}f"fh,ð<L□q,Á,«,Ü,·,ª□C,³,ç,É□Cfifyfœ□[fefBf"fofvfXfef€,ª"ŽŽ^,Á,«,È,ç MAKE
f}fNf□□CŽw—ß□C"AZê%□□ŽŽŽq,à<L□q,Á,«,Ü,·□B,½,¾,µ□C□b,ÍŽg,ì,Ü,¹,ñ□B^È
%□□,ÉfRf}f"fh,ì—á,ðŽ!,µ,Ü,·□B

cd..

bcc -c mysource.c

COPY *.OBJ C:\PROJECTA

bcc32 -c \$(SOURCE) #f}fNf□,É,Á,ç,Ä,Í□C□uMAKE f}fNf□,ìŽg,ç•û□v,ðŽQ□Æ

fRf}f"fh,ì^è"É"l,È\•¶,ÍŽŽ,ì,Æ,¯,è,Á,·□B

[fvfœftfBfNfX...] fRf}f"fh

fRf}f"fhfvfœftfBfNfX

^Ã-Ü,lf<□[f<,Æ-¾Ž!“lf<□[f<,ì¼•û,lfRf}f"fh,É,Á,ç,Ä□CMAKE ,ªfRf}f"fh,ð^—□,·,é•û-
@,ð□C□ü,·,éfvfœftfBfNfX,ðŽw'è,Á,«,Ü,·□BŽŽ,ì•\,Éf□fCfNftf@fCf<,ÁŽg—
p,Á,«,éfvfœftfBfNfX,ì^è—,ðŽ!,µ,Ü,·□B

fvfœftfBfNfX	%□□à
@	fRf}f"fh,ìŽÀ□sŽž,ÉfRf}f"fh,ð•Ž!,µ,È,ç
-□"l	fRf}f"fh,©,ç•Ô,³,ê,½□l— ¼fR□[fh,ª□@□"l,ð',ì,é□ê□#□Cf□fCfNftf@fCf<,lfRf}f"fh,ì□^— □,ð'âŽ~,·,é□B'É□í,í□C□l—¼fR□[fh,ªf[□^ÉSO,Á, ,ê,Í MAKE ,Í^Ü□í□l—¹,·,é□B- ,Æ□"l,ìŠÓ,Éfzf□fCfghfXfy□[fX,ð"ü,ê,Á,ì,È,ç,È,ç
-	fRf}f"fh,ª•Ô,·□l—¼fR□[fh,É,©,©,í,ç,·□Cf□fCfNftf@fCf<,lfRf}f"fh,ì□^— □,ð'±□s,·,é
&	,·,x,Ä,ì□]'@ftf@fCf<,ð•\,·f}fNf□ \$**□C,Ü,½,lf^□[fQfbfg,æ,è□V,µ,çf^fCf€fXf^f"fv,ðŽ□,Á,·,x,Ä,ì□]'@ftf@fCf<,ð •\,·f}fNf□ \$? ,ð"WSJ,·,é□B"WSJ,³,ê,½f}fNf□,ì□]'@ftf@fCf<,²,Æ,ÉfRf}f"fh,ð 1 %□ñŽÁ□s,·,é
!	& fvfœftfBfNfX,Æ"¯—l,É<@"\,·,é

@ ,ìŽg,ç•û

ŽŽ,ÉŽ!,·fRf}f"fh,ì @ fvfœftfBfNfX,ðŽg,Á,Ä□CMAKE ,ªfRf}f"fh,ðŽÀ□s,·,é,Æ,«,ÉfRf}f"fh,ª%□æ-
É,É•Ž!,³,ê,È,ç,æ,α,É,µ,Ü,·□B

diff.exe : diff.obj
@bcc32 diff.obj

- □"l,Æ - ,ìŽg,ç•û

- □"l fvfœftfBfNfX,Æ - fvfœftfBfNfX,í□CfGf%□□[,ª"□¶,µ,½,Æ,«,lf□fCfNftf@fCf<,ì□^—

```
target.exe : target.obj
target.obj : target.cpp
            bcc32 -c target.cpp
```

ŽŸ,ì—á,Á,íC BCC ,áfGf%o[,đ•Ô,μ,Ä,àCMAKE ,í^—,đ'±s,μ,Û,·B

& ,ìŽg,ç•û

```
& fvfCEftfBfNfX,í[]' @ftf@fCf<,²,Æ,É 1 %oñfRf}f“fh,đ”s,μ,Û,·Bfpf
%of[]f^,Æ,μ,Äftf@fCf<,ífŠfXfg,đŽw'è,Ä,«,È,çfRf}f“fh,Ä,í“Á,É•Ö—
~,Ä,·B,½,Æ,í,íCŽŸ,ìLq,Ä,íC
```

```
copyall : file1.cpp file2.cpp
          &copy $** c:\temp
```

ŽŸ,ÉŽì,·,æ,æ,É COPY ,ª 2 %oñCEÄ,Ño,³,ê,Û,·B

```
copy file1.cpp c:\temp
copy file2.cpp c:\temp
```

```
& fvfCEftfBfNfX,đŽw'è,μ,È,çê±,É,íCMAKE ,í COPY ,đ 1 %oñ,μ,©CEÄ,Ño,μ,Û,¹,ñB'□^Ó: &
fvfCEftfBfNfX,íC$** , ,æ,Ñ $! f}fNf□,É'í,μ,Ä,μ,©<@\,μ,Û,¹,ñB
```

MAKE fRf}f“fh%‰%ŽŽŽq

MAKE ,lfRf}f“fh•” ,Å,lflyfCE[]fefBf“foVfXfef€,”C^Ó,lfRf}f“fh,ðŽg,!,Û,.,°C“ÁŽê,È‰‰
‰‰ŽŽŽq,àŽg,±,±,Æ,ª,Å,«,Û,·BMAKE ,Å,ÍC’É[]í,ì‰‰‰ŽŽŽq[]i+[]C- ,È,Ç[]j,!,Û,©[]C^È
‰‰°,!,æ,±,È“ÁŽê,È‰‰‰ŽŽŽq,ªftf[]fg,³,ê,Û,·[]B

‰‰‰ŽŽŽq	‰‰ð[]à
<	•W[]€“ü—í,©,ç,Å,Í,È,Žw’è,lfyf@fCf<,©,ç,ì“ü—í,ðŽg—p,·,é
>	fRf}f“fh,©,ç,ì[]o—í,ðftf@fCf<,É[]’,«[]ž,þ
>>	fRf}f“fh,©,ç,ì[]o—í,ðftf@fCf<,É’Ç‰‰Å,·,é
<<	fef“f[]f‰‰fŠ,lfCf“f‰‰fCf“ftf@fCf<,ð[]i[]¬,μ[]C,±,ì“à—e,ðfRf}f“fh,Ö,ì•W[]€“ü— í,Æ,μ,ÅŽg,±[]B,Û,½[]C-N ,ªŽg—p,³,ê,Å,ç,é[]ê[]ž,lfef“f[]f‰‰fŠfCfXf[] f“fXftf@fCf<,ð[]i[]¬,·,é[]B’[]^Ó: ,±,ê,Í NMAKE ,Å,μ,©Žg—p,Å,«,È,ç
&&	<u>fef“f[]f‰‰fŠfCfXf[]f“fXftf@fCf<,ð[]i[]¬,μ[]C,»),ì-¼’O,ðf[]fCfNftf@fCf<,É’}“ü,·,é</u>
fffŠf~f^	fffŠf~f^,Í[]Cfef“f[]f‰‰fŠfCfXf[]f“fXftf@fCf<,ÅŽg,±[]BfffŠf~f^,Æ,μ,Ä,Í[]C# ^ÈŠO,ì”C^Ó,ì•¶Žš,ðŽg—p,Å,«,é[]B<< , ,æ,Ñ && ,È,Å,ç,Ä,Í[]Cfef“f[]f ‰‰fŠftf@fCf<,ìŠjŽn,Æ[]l—¹,lfefŠf~f^,Æ,μ,ÅŽg,±[]BŠjŽn,lfefŠf~f^,ì, ,é[]s,Å,± ,lCEä,è,È, ,é•¶Žš,!,·,×,Ä-³Ž<,³,ê,é[]B[]l—¹,lfefŠf~f^,ì 1 []s“à,È,±,ê,¾, ,ð<L[]q,·,é

MAKE f}fNf, ÌŽg, ç•û

f}fNf, íCMake ,af}fCfNftf@fCf<,ÁĚŸo,.,é,½,Ñ,É" C^Ó,ì•ŸŽš—
ñ,É" WŠJ,.,é•í" ,Á,·B,½,Æ,!,íC•ŸŽš—ñ "mylib.lib" ,ð•\,· LIBNAME ,Æ,ç
,af}fNf,ð'è<` ,.,é,É,íCf}fCfNftf@fCf<,ìæ"ª,É LIBNAME = mylib.lib ,Æ,ç,æ}s,ð"ü—
í,µ,Û,·B,±,ê,ÁCMAKE ,lf}fNf \$(LIBNAME) ,ðĚŸo,.,é,ÆC•ŸŽš—ñ mylib.lib
,Á'u,«Š,!,Û,·Bf}fNf,ðŽg,æ
,ÆC,³,Û,´,Û,Éfvf}fWffNfg,É±,í,¹,Ä,íX,Á,«,éfef"fvfĚ[]fg,lf}fCfNftf@fCf<,ðì[]¬,Á,«,Û,·B
f}fCfNftf@fCf<,Áf}fNf,ðŽg—p,.,é,É,íC\$(MacroName) ,Æ"ü—í,µ,Û,·B,±,±,ÁCMacroName
,l'è<` ,.,é}fNf,Á,·Bf}fNf-¼,ð^í,þ,ì,É'tfjfbfR { } ,Û,½,lfjfbfR () ,ðŽg—p,Á,«,Û,·B
f}fNf,íCf}fCfNftf@fCf<,ì,Ç,±,É<Lq,³,ê,Ä,ç,é,©,É,æ,èC^È
%º,ÉŽ!,.,³,Û,´,Û,ÉŽž" _ ,Á" WŠJ,³,é,Û,·B
▪ flfXfg,µ,½f}fNf,íCŠO'æ,lf}fNf,ªĚÄ,Ño,³,é,é,Æ,«,É" WŠJ,³,é,é
▪ f<[]f<'t,lf}fNf,ÆŽw—ß't,lf}fNf,íCMAKE ,af}fCfNftf@fCf<,ðÁ[]%º
,ÉŽQ[]Æ,µ,½,Æ,«,É" WŠJ,³,é,é
▪ frf}f"fh't,lf}fNf,íCfRf}f"fh,ªŽÀ[]s,³,é,é,Æ,«,É" WŠJ,³,é,é
f}fCfNftf@fCf<,É-ç'è<` ,lf}fNf,ª, .é[]ê[]#CMAKE ,í" ,Ÿ-
¼' O,lf}fCfNftf@fCf<[]fefBf"fofvXfef€ŠÄ«•í"[]i'Éí,í SET ,Á'è<` []j,ð'T,µC" WŠJfefLfxfg,Æ,µ,Ä,±
,l'è<` ,ðŽg—p,µ,Û,·B,½,Æ,!,íCf}fCfNftf@fCf<,É \$(PATH) ,Æ<Lq,µ,½,´,é,Ç,à PATH
,ª'è<` ,³,é,Ä,ç,É,ç[]ê[]#CAUTOEXEC.BAT ,l PATH ,Á'è<` ,µ,½fefLfxfg,ªŽg—
p,³,é,Û,·BŠÄ«•í" ,l'è<` ,É,Á,ç,Ä,ìÚx,íCf}fCfNftf@fCf<[]fefBf"fofvXfef€,lf}fj...fAf<,ðŽQ[]Æ,µ,Ä,-
,¾,¾,çB

MAKE f}fNf,ì'è<

f}fCfNftf@fCf<,ìf}fNf,ì'è<,ì'è"É"l,È\•¶,íCŽŸ,ì,Æ,"è,Å,·B

MacroName = expansion_text

▪ MacroName ,Å,íC'å•¶Žš,Æ-•¶Žš,ª<æ•É,³,é,éB,Å,Ü,èCMACRO1 ,Æ Macro1 ,í<æ•É,³,é,é

'^Ó: flfyfCE[fefBf"fofvfXfef€ ,É,æ,Á,Ä,íCŠÅ<<•í" ,É-•¶Žš,đŽg—p,Å,« ,éé# ,ª ,è,Ü,·B ,±,íé#CŠÅ<<•í" ,Æf}fCfNftf@fCf<,ìf}fNf,Å'å•¶Žš/-•¶Žš,đ# ,í,¹,é•K—v,ª ,è,Ü,·B

▪ MacroName ,í 512 •¶Žš^È"à,Æ,; ,é

▪ expansion_text ,í 4096 •¶Žš^È"à,É,µC%op"ŽšC<å"Ç" _CfzfCfCfXfy[fX,Å\ - , ,é

Šef}fNf,íf}fCfNftf@fCf<,ì•É,ìs,É<Lq,µCŠef}fNf'è<,í"ª ,©,çŽw'è,µ,Ü,·B,í,©,è,; ,ç,æ,ª ,ÉCf}fNf,ì'É}f}fCfNftf@fCf<,ìæ"ª ,É<Lq,µ,Ü,·BMacroName ,É'í,µ,Å•í" ,ì'è<,ª ,éé#CCEÅ,ç'è<,íV,µ,ç'è<,É,æ,Á,Äã ,« ,ª ,é,Ü,·B

f}fNf,ìfRf}f"fhf%ofCf"flfvfVf+f" -D ,đŽg,Á,Ä,à'è<,Å,« ,Ü,·B"™ t (=)

,ì'OEã,ÉfXfy[fX,íŽw'è,Å,« ,Ü,¹,ñB,½,¾,µCfXfy[fX,Å,» ,é,¼,é,đ<æ∅,é,î•í" ,ìf}fNf,đ'è<, Å,« ,Ü,·BfRf}f"fhf%ofCf" ,Å'è<,µ,½f}fNf,ì—á,đŽŸ,ÉŽ!,µ,Ü,·B

make -Dsourcedir=c:\projecta

make -Dcommand="bcc32 -c"

make -Dcommand=bcc32 option=-c

▪ f}fCfNftf@fCf<,Å'è<,ª ,é,½f}fNf,íCfRf}f"fhf%ofCf" ,Å'è<,ª ,é,½f}fNf,đã ,« ,; ,é

MAKE f}fNf "à,ì•ŕŽš—ň'uŠ.

```
MAKE ,Å,ÍC, ,ç, ©, ŕ, ß'è<` ,µ, ½f}fNf "à,ì•ŕŽš, ð^êŽŽ"l, É'uŠ, Å, «, Ü, ·B, ½, Æ, l, ÎCf}fNf, ð
SOURCE = f1.cpp f2.cpp f3.cpp ,Å'è<` ,µ, ÅC$(SOURCE:.cpp=.obj) ,ÆŽw'è, ,é, ÆC•ŕŽš—
ň .obj ,Å•ŕŽš—ň .cpp ,ð'uŠ, Å, «, Ü, ·B'uŠ, Å, Íf}fNf, ðÅ'è<` ,µ, Ü, ¹, ñB
```

```
f}fNf'uŠ, ì<K'¥, Í^È%º, ì, Æ, ", è, Å, ·B
· \•ŕF $(MacroName:original_text=new_text)
· fRf" ,ì'OCEã, ìfzfCfgyfX, Í•s%Å
· original_text "à,ì•ŕŽš—ň, Íf}fNf'è<` "à,ì•ŕŽš—ň, Æ^è'v, ³, ¹, éi, ±, ì•ŕŽš—
ň, Å, ÍC'ã•ŕŽš, Æ—•ŕŽš, æ•É, ³, è, éj
```

```
, ±, ì, æ, x, É, , è, Í'uŠ.f}fNf "à, Åf}fNf, æŽg, l, Ü, ·B, ½, Æ, l, ÎCŽŸ, ì, Æ, ", è, Å, ·B
```

```
MYEXT=.C
SOURCE=f1.cpp f2.cpp f3.cpp
$(SOURCE:.cpp=$(MYEXT)) #f1.cpp ,ð f1.C ,É•İX, ,é, ,È, Ç
```

ffftjHf<fg,ì MAKE f}fNf□

MAKE ,É,í□Cf□fCfNftf@fCf<,ĂŽg,ì,éffftjHf<fg,ìf}fNf□,ª, ,è,Ü,·□BŽŸ,ì•\,É□Cf}fNf□'è<',Æ□C= ¾Ž;“lf<□[f<,“æ,N^Ă-Ü,ìf<□[f<,Ă“WŠJ,³,é,½f}fNf□,ì^é—,ðŽ;ì,μ,Ü,·□B

f}fNf□	^Ă-Ü,ì“WŠJ	-¾Ž;ì“WŠJ
\$*	fpfX□]’@ftf@fCf<-¼	fpfXf^□[fQfbfgftf@fCf<-¼
\$<	fpfX□]’@ftf@fCf<-¼ +Šg’£Žq	fpfXf^□[fQfbfgftf@fCf<-¼ +Šg’£Žq
\$:	□]’@ftf@fCf<,ìfpfX	f^□[fQfbfgftf@fCf<,ìfpfX
\$.	□]’@ftf@fCf<-¼+Šg’£Žq	f^□[fQfbfgftf@fCf<-¼+Šg’£Žq
\$&	□]’@ftf@fCf<-¼	f^□[fQfbfgftf@fCf<-¼
\$@	fpfXf^□[fQfbfgftf@fCf<-¼ +Šg’£Žq	fpfXf^□[fQfbfgftf@fCf<-¼ +Šg’£Žq
\$**	fpfX□]’@ftf@fCf<-¼ +Šg’£Žq	,,x,Ă,ì□]’@ftf@fCf<+Šg’£Žq
\$?	fpfX□]’@ftf@fCf<-¼ +Šg’£Žq	ĀĂ,č□]’@ftf@fCf<

f}fNf□	“WŠJ	fRf□f“fg
__MSDOS__	1	MAKER.EXE ,ì□ê□#
__MAKE__	0x0400	MAKE ,ìfo□[fWf†f“”Ô□+,ì 16 □i•\<L
MAKE	MAKE	MAKE ,ìŽÀ□sĀ`Ž@ftf@fCf<-¼
MAKEFLAGS	fìfvfVf†f“	fRf}f“fhf%ofCf“,Ă“ü—Í,μ,½fìfvfVf†f“
MAKEDIR	fffBfĀfNfgfŠ	MAKE.EXE ,ª, ,éfffBfĀfNfgfŠ

ffftfHf<fg,ì MAKE f}fNf,ìCü

ffftfHf<fg,ìf}fNf,ì,Á,Í•K—v,È•¶Žš—ñ,ª“¼,ç,ê,È,çê¶Cf}fNfCüŽq,ðŽg—p,·,ê,Î-
Ú“l,É¶,Á,½•¶Žš—ñ•”•ª,ðŽæ,èo,¹,Ü,·Bf}fNfCüŽq,íÉí \$ < ,Ü,½,í \$ @ ,ÁŽg—p,µ,Ü,·B
ffftfHf<fg,ìf}fNf,ì,èCü,·,é,É,íŽŸ,ì\•¶,ðŽg—p,µ,Ü,·B

\$(MacroName [modifier])

ŽŸ,ì\,ìf}fNfCüŽq,Æ,» ,ìŽg—p—á,ì^ê—,ðŽ!,µ,Ü,·if^[fQfbfg,ª C:\PROJECTA\
MYSOURCE.C ,ìé¶jB

CüŽq “WŠj,³,ê,éftf@fCf<-¼•”•ª	—á	C<%oÉ
D fhf%ofCfu-¼,ÆfffBfCefNfgfŠ-¼	\$(<D)	C:\PROJECTA\ MYSOURCE.C
F fx[fX-¼,ÆŠg'£Žq	\$(<F)	MYSOURCE.C
B fx[fX-¼,ì,Ÿ	\$(<B)	MYSOURCE
R fhf%ofCfu-¼CfffBfCefNfgfŠ-¼Cfx[fX-¼	\$(<R)	C:\ PROJA\MYSOURCE

<u>.precious</u>		□ì□¬,ªŽ, "s,μ,Ä,à 1 ,Â,Ü,½,í•i□",ìf^□[fQfbfg,ð•Ù'¶,·,é
.silent	-s	MAKE ,ªfRf}}f"fh,ð•\Ž!,μ,È,ç,ÅŽÀ□s,·,é
<u>.suffixes</u>		, ,ç,Ü,ç,È^È'¶ŠÖŒW,ì,½,ß,ì^Ã-Ü,ìf<□[f<,ðŒ^,ß,é
.swap	-S	fRf}}f"fh,ðŽÀ□s,·,é'O,É MAKE Ž©□g,ðfXf□fbfvfAfEfg,·,é,æ,æŽwŽ!,·,é
<u>!undef</u>		f}}fNf□,ì'è<` ,ð□Á<Ž,·,é□B,» ,ìŒăf}}fNf□,ª-ç'è<` ,É,È,é

.autodepend

Ž©“®^Ě‘ŕftf@fCf<,Æ,íC□i□-,·,éf^□[fQfbfg,ÉŽ©“®“l,ÉfCf“fNf<□[fh,³,ê,éftf@fCf<□iC++ fŕ
□[fXfR□[fh,ÉfCf“fNf<□[fh,³,ê,éfwfbf_□[ftf@fCf<,È,Ç□j,Å,·□B.autodepend ,ð—
LÆø,É,·,é,Æ□CMAKE ,í .OBJ ,ð□i□-,·,é,ì,ÉŽg—
p,·,é,·,×,Ä,iftf@fCf<□iŽ©“®^Ě‘ŕftf@fCf<,àŠÜ,þ□j,lf^fCf€fXf^f“fv,ð”äŠr,μ,Ü,·□B.OBJ
,ð□i□-,·,é,ì,ÉŽg—p,·,éftf@fCf<,lf^fCf€fXf^f“fv,^a .OBJ
ftf@fCf<,lf^fCf€fXf^f“fv,æ,è□V,μ,ç□ê□#□C.OBJ
ftf@fCf<,í□ÄfRf“fpfCf<,³,ê,Ü,·□B.autodepend□i,Â,Ü,è -
a□j,í□CÆ<□‡,³,ê,½^Ě‘ŕŠÖÆW,ðÆ`□-,·,é,©,í,è,ÉŽg,!,Ü,·□B

!error

```
!error Žw—β,ì□•¶,íŽŸ,ì,Æ,¨,è,Å,·□B
```

```
!error f□fbfZ□fW
```

```
MAKE ,í,±,ìŽw—β,ðĈ©,Â,¯,é,Æ□^—□,ð'âŽ~,μ□CŽŸ,ìf□fbfZ□fW,ð•\Ž!,μ,Û,·□B
```

```
Fatal makefile exit code: Error directive: f□fbfZ□fW
```

```
ŽŸ,ì—á,ÅŽ!,·,æ,κ,É□C□ðĈ□•¶,É !error ,ð'}“ü,μ□C□^—□,ð^Û□í□|—1,3,1,ÄfGf  
%□□f□fbfZ□fW,ð•\Ž!,μ,Û,·□B
```

```
!if !$d(MYMACRO)  
#MYMACRO ,ð'è<`3,ê,Ä,ç,È,¯,ê,í  
!error MYMACRO ,ð'è<`3,ê,Ä,ç,È,ç  
!endif
```

```
MYMACRO ,ð'è<`3,ê,Ä,ç,È,ç□ê□‡,í□CMAKE ,í□|—1,μ,ÄŽŸ,ìf□fbfZ□fW,ð•\Ž!,μ,Û,·□B
```

```
Fatal makefile 4: Error directive: MYMACRO ,ð'è<`3,ê,Ä,ç,È,ç
```

fGf%□□f`fFbfN□\$Ĉä

- ```
fGf%□□f`fFbfN,ì□$Ĉä•û-@,í□CMAKE ,É,æ,è^È%□□,ì 4 'Ê,è,ð'ñ<Ÿ,3,ê,Û,·□B
```
- .ignore Žw—β,í□Cf□fCfNftf@fCf<“à,ì'l'ð,μ,½•”•â,É,Ä,ç,ÄfGf%□□f`fFbfN,ð-<sup>3</sup>Ĉø,É,·,é
  - -i fRf}f“fhf%□fCf“flfvfVf‡f“,í□Cf□fCfNftf@fCf<'S'l,ìfGf%□□f`fFbfN,ð-<sup>3</sup>Ĉø,É,·,é
  - - □“”lfvfĈftfBfNfX,ìf<□f<,ì^è•”,Æ,μ,Ä“ü—l,·,é,à,ì,<sup>3</sup>/<sub>4</sub>,□C,±,ê,í□|—<sup>1</sup>fR□fH,ðŽw`è,ì□“l,ð`´,; ,é□ê□‡,ÉŠÖ~AfRf}f“fh,ìfGf%□□f`fFbfN,ð-<sup>3</sup>Ĉø,É,·,é
  - - fvfĈftfBfNfX,í□C□|—<sup>1</sup>fR□fH,É,©,©,í,ç, ,ŠÖ~AfRf}f“fh,ìfGf%□□f`fFbfN,ð-<sup>3</sup>Ĉø,É,·,é

## !if ,Æ,»,ì¼,ìðĀŽw—ß

!if Žw—ß,íĀĀ ,ì if •Ā,ì,æ,æ,É<@“\,μ,Û,·ĀBŽŸ,ÉŽì,·,æ,æ,ÉĀĀ!if ,“,æ,Ń,»,ì¼,ìðĀŽw—ß,ì\ •Ā,ìfRf“fpcf%o,ìðĀĀ,Æ—pŽ—,μ,Ā,ċ,Û,·ĀB

```
!if ðĀĀ !if ðĀĀ !if ðĀĀ !ifdef f}fNfĀ
!endif !else !elif ðĀĀ !endif
 !endif !endif
```

^È%o,ìŽ®,í“™%o,Ā,·ĀB

```
!ifdef f}fNfĀ,Æ !if $d(f}fNfĀ)
!ifndef f}fNfĀ,Æ !if !$d(f}fNfĀ)
```

ðĀĀŽw—ß,É“K—p,³,è,é<K‘¥,í^È%o,ì,Æ,“,è,Ā,·ĀB

- !ifĀ!ifdefĀĀ,“,æ,Ń !ifndef ,ìŽw—ß,Æ !endif Žw—ß,Æ,ìŠÔ,É,íĀĀ1 ,Ā,ì !else Žw—ß,ð<LĀq,Ā,«,é
- !ifĀ!ifdefĀĀ!ifndef ,ìŽw—ß,Æ !endif Žw—ß,Æ !endif ,Æ,ìŠÔ,É,íĀĀ•;Ā” ,ì !elif Žw—ß,ð<LĀq,Ā,«,é
- f<[f,ð•;Ā” ,ìðĀĀŽw—ß,É,í,½,Ā,Ā•ª,“,é,ì,í•s%oĀ
- ðĀĀŽw—ß,ìfXfg,Ā,«,é
- !ifĀ!ifdefĀĀ!ifndef ,É,íĀĀí%ož,·,é !endif Žw—ß,ð•K,“,“ ,ìftf@fĀĀf<“à,É<LĀq,·,é

!if Žw—ß,Æ !endif Žw—ß,ìŠÔ,É<LĀq,Ā,«,éĀ•ñ,í^È%o,ì,Æ,“,è,Ā,·ĀB

```
f}fNfĀ'è<` !include Žw—ß
-¾Ž!“ìf<Āf< !error Žw—ß
^Ā-Û,ìf<Āf< !undef Žw—ß
```

if •Ā,ìðĀĀ,íĀĀ10 ĀĀĀĀ8 ĀĀĀĀ16 ĀĀ,ì'è” ,“,æ,ŃŽŸ,ì\,ÉŽì,·%o%oŽŽŽq,ĀĀĀĀĀĀ,·,éðĀĀŽ®,Ā\ ,μ,Û,·ĀB

| %o%oŽŽŽq | %oðĀà      | %o%oŽŽŽq | %oðĀà               |
|----------|------------|----------|---------------------|
| -        | •,Āt“½“]   | ?:       | ðĀĀŽ®               |
| ~        | f}fNfĀ•âĀ” | !        | ~_—Ā“! NOT          |
| +        | %oĀŽŽ      | >>       | %oE}Vftfg           |
| -        | Ā,ŽŽ       | <<       | Ā}Vftfg             |
| *        | ĀæŽŽ       | &        | f}fNfĀ,²,Æ,ì AND    |
| /        | ĀœŽŽ       |          | f}fNfĀ,²,Æ,ì OR     |
| %        | Āè—]       | ^        | f}fNfĀ,²,Æ,ì XOR    |
| &&       | ~_—Ā“! AND | >=       | ,æ,è'â,«,ċ,©“™,μ,ċ* |
|          | ~_—Ā“! OR  | <=       | ,æ,è'â,«,ċ,©“™,μ,ċ* |
| >        | ,æ,è'â,«,ċ | ==       | “™,μ,ċ*             |
| <        | ,æ,èĀĀ³,ċ  | !=       | “™,μ,,È,ċ*          |

\*%o%oŽŽŽq,í•ĀŽš—ñŽ®,Ā,à<@“\,μ,Û,·ĀB

MAKE ,íðCEŽ®,đ 32 frfbfg•„†•t.«@” ,Æ,μ,ÄC,Ü,½,Í•¶Žš—ň,Æ,μ,Ä•]‰ζ,μ,Ü,·B

## !include

```
,±,ìŽw—β,í□CC,Ü,½,í C++ CE¾CEê,ì #include fvfŠfvf□fZfbfTŽw—β,ÉŽ—,Ä,ç,Ü,·□B,±
,ê,ìf□fCfNftf@fCf<,É•É,ìftf@fCf<,ìfefLXfg,ðŽæ,èž,Ý,Ü,·□B
```

```
!include ftf@fCf<-¼
```

```
ftf@fCf<-¼,í“ñ□d^ø—p•,,□i“□j,Ü,½,í•s“™ □+fffbfR□i<>□j,Å^í,β□CŽw—β,í-
³□§CEÀ,ì□[,³,ÉfLXfg,Å,«,Ü,·,ª□f□fCfNftf@fCf<,Å,í !include Žw—β,ð“ñ□d,É<L□q,·,é,ì,í<-
%oÅ,³,é,Ü,¹,ñ□B,±,ì□è□#□CfGf%o□[f□fbfZ□[fW□uCycle in the include files□v,ª•\Ž|,³,é,Ü,·□B
```

```
f<□[f<□CfRf}f“fh□CŽw—β,í 1 ,Å,ìf□[fXftf@fCf<,ì†,ÅŠ@CE<,³,¹,Ä,,¾,¾,ç□B!include
ftf@fCf<,ÅfRf}f“fh,ðŠŽn,μ□Cf□fCfNftf@fCf<,Å,±,é,ð□|—¹,³,¹,é,æ,α,È<L□q,í□s,!,Ü,¹,ñ□B
```

```
-l fRf}f“fhf%ofCf“flfvfVf†f“,Å•É,ìffBfCEfNfgfŠ,ðŽw’è,μ,Ä,ç,È,çCEÀ,è□CMAKE
,ìfjCEf“fgffBfCEfNfgfŠ,Å !include ftf@fCf<,ð’T,μ,Ü,·□B
```



## !message

```
!message Žw—ß,Å,íCfCfNftf@fCf<,©,ç%œ-Ê,ÉfZ[fW,đ'—,ê,Ü,·BfZ[fW,đŽg,κ
,ÆC“KØ,É“@ì,μ,Ě,čfCfNftf@fCf<,đffofbfO,·,é,ł,É•Ö—~,Å,·B,½,Æ,!,íCf}fNf`è<` ,É-
â`è,a, ,éê‡CfCfNftf@fCf<,ÉŽŸ,ÉŽ!,·s,đ'}“ü,Å,«,Ü,·B
```

```
!message The macro is defined here as: $(MacroName)
```

```
MAKE ,a,±,ìs,đ%đŽB,·,é,ÆCf}fNf,a.CPP ,É“WŠJ,3,ê,éê‡,É,í%œ-Êă,ÉuThe macro is
defined here as: .CPPv,Æ•Ž!,3,ê,Ü,·B
```

## .path.ext

```
.path.ext Žw—β,íŽw'è,ìŠg'£Žq,ðŽ□,Âftf@fCf<,ð'T,·□ê□Š,ð MAKE ,ÉŽwŽ!,μ,Ü,·□BŽŸ,ÉŽ!,—
á,Å,í□CC:\SOURCE ,Ü,½,í C:\CFILES ,Å .c Šg'£Žq,ðŽ□,Âftf@fCf<,ð'T,μ□CC:\OBJS ,Å .obj
Šg'£Žq,ðŽ□,Âftf@fCf<,ð'T,·,æ,π,ÉŽwŽ!,μ,Ü,·□B
```

```
.path.c = C:\CSOURCE;C:\CFILES
.path.obj = C:\OBJS
```

## .precious

MAKE ,Å, ì□ì□¬, ºŽ, "s, ·, é, Æf^□[fQfbfgftf@fCf<, í□í□œ, º, ê, Û, ·□B.precious Žw—  
ß, íftf@fCf<, ð□í□œ, µ, È, ç, æ, x, È, ·, é, ì, Å□C, , éŽí, ìf^□[fQfbfg, È, í-], Û, µ, ç, à, ì, Å, ·□B, ½, Æ, ð, ì□Cf  
%ofCfuf%ofŠ, Èf, fWf...□[f<, ð'Ç%oÁ, ·, é□ì□¬, ÈŽ, "s, µ, Å, à□Cf%ofCfuf%ofŠ, ð□í□œ, µ, ½, , È, ç□ê□‡, à,  
, è, Û, ·□B

.precious Žw—ß, ì□\•¶, íŽŸ, ì, Æ, ", è, Å, ·□B

.precious: target [target ...]



## !undef

!undef Žw—β,ì\•¶,íŽŸ,ì,Æ,¨,è,Å,·B

!undef f}fNf-¼

!undef i'è`%øœj,íCŽw'è,ì}fNf,ðÁ<Ž,μ,Û,·B,±,ê,É,æ,èC!ifdef f}fNf-¼,ìfefXfg,Í<U,Æ,Ë,è,Û,·B

## Žw—β“à,À,ìf}fNf□,ìŽg,ç•û

f}fNf□ \$d ,í !if □đCE□Žw—β,Æ,Æ,à,É—p,ç□C“Á’è` ,ìf}fNf□,â’è<` ,³,ê,Ä,ç,é,©,Ç,κ,©,ì□^—□,đ□s,ç  
,Ü,·□B\$d ,ìCEă,ë,É,íjfbfR,Ü,½,í’tjfbfR,Å^í,ñ,¾f}fNf□-¼,đ<L□q,μ,Ü,·□B,±,ì—  
á,đŽŸ,ÉŽ|,μ,Ü,·□B

```
!if $d(DEBUG) # DEBUG ,â’è<` ,³,ê,Ä,ç,é,î
bcc32 -v f1.cpp f2.cpp # ffbfbfO□î•ñ•t,«,ÅfRf“fpfCf<,μ
!else # ,» ,ê^ĚŠO,ì□ê□‡
bcc32 -v- f1.cpp f2.cpp # ffbfbfO,ì□î•ñ,ÆŽæ,è□ž,Ü,É,ç
!endif
```

## fkf<f>fNf

-ç'è<` ,ìf}fNf-¼,ìê#C!ifdef f}fNf-¼,ìfefXfg,Í<U,ð•Ô,μ,Û,·Bfkf<,Æ,μ,Ä'è<` ,³,ê,½f}fNf-¼,ìê#,ì^,ð•Ô,μ,Û,·Bfkf<f}fNf,ð'è<` ,·,é,É,íCf}fNf'è<` ,É,¨,¯,é™ ¯+i=¯j,ì%E'x ,ÉfXfy[fX, ©  
%üs•¶Žš,ðŽw'è,μ,Û,·B,½,Æ,¡,îCŽŸ,ÉŽ!,·s,ífcfNftf@fcf<"à,Åfkf<f}fNf,ð'è<` ,μ,Û,·B

NULLMACRO =

^È%º,ÉŽ!,·s,íCMAKE fRf}f"fhf%ofCf",Åfkf<f}fNf,ð'è<` ,Å,«,Û,·B

NULLMACRO=""

-DNULLMACRO

## fRf}f“fhf%ofCf“fŠf\[]fXfc[]f<,iŽg,ç•û

^È%º,ìRf}f“fhf%ofCf“fŠf\[]fXfc[]f<,a, ,è,Ü,·B

## fŠf\[]fXfRf“fpfCf%º

BRCC32.EXE ,Íf{[]f%of“fh,ìŠf\[]fXfRf“fpfCf%º,À,·BBRCC32.EXE ,ìŠf\[]fXfXfNfŠfvgftf@fCf<[]i.RC ftf@fCf<[]j,ðfRf“fpfCf<,μ,ÄfofCfifŠ,ì .RES ftf@fCf<,ð[]¬,μ,Ü,·B

## fŠf\[]fXfŠf“fj

RLINK32.DLL ,íC.RES ftf@fCf<CE`Ž®,©,ç .EXE ftf@fCf<,ÉfŠf\[]fX,ðCE<[]‡,μC.EXE ftf@fCf<,ð Windows ,ìŽÅ[]sCE`Ž®,Æ,μ,Äf}[]fN,·,éŠf\[]fXfŠf“fj,À,·BRLINK32.DLL ,í TLINK32.EXE ,ð'É,μ,ÄŽg—p,μ,Ü,·B

## fŠf\[]fXfVfFf<

BRC32.EXE ,íCBRCC32 ,Æ RLINK32 ,íTLINK32 ,ð'É,μ,Ä[]j1 ,À,ìfXfefbfv<N“®,·,é,± ,Æ,ª,À,«,Ü,·B



# fšf\ [fXfRf"fpfCf%o iBRCC32]

ŠÖ~A [€-Ú] —á

BRCC32 , [CfŠf\ [fXfRf"fpfCf%o, ]fRf}f"fhf%ofCf"fo [fWf+f" ,Å, ·BfŠf\ [fXfXfNfŠfvfgftf@fCf< [i.RC]j, ð"ü—í, Æ, μ, ÅŽó, ~ Žæ, è [CfŠf\ [fXfifufWfFfNfgftf@fCf< [i.RES]j, ðo—í, Æ, μ, Å [¶] —, μ, Ú, · [B

[ \ • ¶  
BRCC32 [options] <filename>.RC

## fRf}f"fhf%ofCf"flfvfVf+f"

BRCC32 , ]fRf}f"fhf%ofCf"flfvfVf+f" , íŽŸ, ì, Æ, " , è, Å, · [B

### flfvfVf+f"      [ à-¾

---

|                       |                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @responsefile         | Žw'è, , è, ½fRf}f"fhftf@fCf<, ©, çŽwŽ!, ð"Ç, Ý [ž, p                                                                                                           |
| -c <code page>        | fšf\ [fX, ]-  -ó, ÉŽw'è, , è, ½fR [fhfy [fW, ðŽg, ¶ [B-C , aŽw'è, , è, È, ç , Æ [CffftfHf<fg, ì ANSI fR [fhfy [fW, aŽg—p, , è, é                               |
| -d<name> [= <string>] | fvfšfvf [fZfbfTfVf" f {f<, ð'è< , , , é                                                                                                                        |
| -fo<filename>         | [o—í, , è, é .RES ftf@fCf<, ]-¼'O, ðŽw'è, , , é [ffftfHf<fg, Å, í BRCC32 , í"ü —í, ì .RC ftf@fCf<, Æ" -¼, ÅŠg'fŽq, ð .RES , È, μ, ½ftf@fCf<, ð [¶] —, , , é [j |
| -i<path>              | 1 , Å^È [ä, ]fffBfCefNfgfŠ, ðfCf" fNf< [fhCEŸ [ðfpfX, É'Ç %oÅ, , , é [i • j "Žw'è, , , é [è [¶, ]fZf~fRf [f" , Å<æ [Ø, é [j                                    |
| -m                    | -C fXfCfbf` , ÅŽw'è, μ, ½fR [fhfy [fW, Éf_fuf<fofCfg • ¶ ŽšfZfbfg [iDBCS [j, ì • ¶ Žš, aŠÜ, Ü, è, é, ±, Æ, ðŽ!, ,                                              |
| -r                    | , ±, ]fXfCfbf` , ]-¾<, , è, é [B'¾, ]šf\ [fXfRf"fpfCf%o, Æ, ìCEÝŠ • [«, ì, ½, ß, É —p^Ó, , è, Å, ç, é                                                          |
| -v                    | [^ — [CEo%oßf [fbfZ [fW, ð • \Ž!, , , é                                                                                                                        |
| -x                    | CE» [Ý, ]fCf" fNf< [fhf [pfX, ð [í [æ, , , é                                                                                                                   |
| -? or -h              | fwf<fv, ð • \Ž!, , , é                                                                                                                                         |
| -16                   | 16 frfbfgfšf\ [fX, ð [¶] —, , , é                                                                                                                              |
| -32                   | 32 frfbfgfšf\ [fX, ð [¶] —, , , é                                                                                                                              |

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BRCC32 , [CWS\_VISIBLE , â BS\_PUSHBUTTON , È, Ç, ì Windows , ]fRf, f" fšf\ [fX, ÉŠÖ, , , é"è [¶] , ð, , ç, ©, ¶, ß'è< , μ, Ú, · [B, Ü, ½ [CRC\_INVOKED , Æ WORKSHOP\_INVOKED , Æ, ç , ¶fRf"fpfCf%o, ÉŠÖ, , , é"ÅŽêfvf" f {f<, à'è< , μ, Ú, · [B, ±, è, ç, ]fvf" f {f<, [Cf\ [fXfefLfxfg" à, ]fvfšfvf [fZfbfT, ] [ðCE [¶, ÅfRf"fpfCf<, ð [šCEä, , , é, ½, ß, ÉŽg—p, , , é, ± , Æ, a, Å, «, Ü, · [B, ½, Æ, !, ]'è [¶] , ðŽŸ, ì, æ, ¶, ÉŽg, ¶, ÆfRf"fpfCf<, ]' — "x, ð'á • [ , É [ , , ß, é, ±, Æ, a, Å, «, Ü, · [B

```
#ifndef WORKSHOP_INVOKED
#include "windows.h"
#endif
```

%o^ÈCEÝŠ • [«

ŽŸ, ì [ \ • ¶, ]%o^ÈCEÝŠ • [«, ì, ½, ß, ÉfTf [ [fg, , è, Å, ç, Ü, · [B

[ \ • ¶

BRCC32 [options] <filename>.RC

**fRf}f“fhf%ofCf“flfvfVf#f“**

BRCC32 ,íŽŸ,ìflfvfVf#f“,đŽó,~“ü,ê,Û,·B

**flfvfVf#f“** □à-¾

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-31 Windows 3.1 ĆÝŠ·,ì .RES ftf@fCf<,đ□ì□-,·,é

-w32 Win32 ĆÝŠ·,ì .RES ftf@fCf<,đ□ì□-,·,é

---

## fŠf\[]fXfRf“fpfCf%o,iŽg—p—á

ŠÖ~A[]€-Ú

ŽŸ,i—á,í[]CfCf“fNf<[]fhfpfX,É 2 ,Â,ìffBfÆfNfgfŠ,đ’Ç%oÁ,μ[]C“ü—í,ì .RC ftf@fCf<,Æ“ -  
¼,ì .RES ftf@fCf<,đ[]ì[]-,μ,Ü,·[]B

brcc32 -i<dir1>;<dir2> <filename>.RC

ŽŸ,i—á,í[]C“ü—í,ì .RC ftf@fCf<,Æ^Ù,È,é-¼’O,ì .RES ftf@fCf<,đ[]ì[]-,μ,Ü,·[]B

brcc32 -fo<filename>.RES <filename>.RC

ŽŸ,i—á,í[]C16 frfbfg,ì .RES ftf@fCf<,đ[]ì[]-,μ,Ü,·[]B

brcc32 -16 -fo<filename>.RES <filename>.RC

## fšf [fXfšf“fj iRLINK32 j

ŠÖ~A [€-Ú —á

RLINK32 , í .RES ftj@fCf<, ð .EXE ftj@fCf<, ÉCE< [†, µ, Ä Windows  
 , iŽÄ [sCE`Ž @ftj@fCf<, ð [i [–, µ, Ü, · [BRLINK , í 1 ‘Í [ã , l f f u f W f F f N f g g t f @ f C f < [ i . R E S [ j , ð “ ü —  
 Í, Æ, µ, Ä Žó, Žæ, è [C1 , Ä, i Windows ŽÄ [sCE`Ž @ftj@fCf<, ð [o — Í, µ, Ü, · [BRLINK32 , í C • ¶ Žš —  
 ñ f e [ [ f u f < , Æ f [ [ f b f Z [ [ f W f e [ [ f u f < , l f t j B f b f N f X f A f b f v , ð [ s , ± , Æ , Å f Š f \  
 [ [ f X , ð f Š f “ f N , µ , Ä , © , ç [ C f Š f “ f N , µ , ½ f Š f [ [ f X , ð ŽÄ [s % Ä “ \CE`Ž ® , ÉCE< [†, µ, Ü, · [BRLINK32 , í  
 TLINK32 , © , ç 32 f r f b f g f Š f \ [ f X , ð f Š f “ f N , · , é , ½ , ß , ÉCEÄ , Ñ [o , ³ , é , Ü , · [B

[ \ • ¶

rlink32 [options] <filename>.RES <filename>.EXE

### fRf}f“fhf%ofCf“flfvfVf†f“

RLINK32 , í ŽŸ , l f l f v f v f † f “ , ð Žó , “ ü , é , Ü , · [B

#### flfvfVf†f“ [à-¾

- @<filename> Žw'è, ³, ê, ½ fRf}f“fhftf@fCf<, © , ç ŽwŽ!, ð“Ç, Ý [ž, p
- d .EXE ftj@fCf<, © , ç fŠf [ [ f X , ð [i [œ , · , é [i .RES  
ftj@fCf<, ³ Žw'è, ³, ê, É, ç [ [ [ [ † , l f f f t f H f < f g “ @ [i [j
- fe<filename> [o — Í, · , é .EXE ftj@fCf<, l -¼ 'O, ð Žw'è, · , é
- fi<filename> 'Ç % Ä , i “ ü — l f t j @ f C f < , ð Ž w ' è , · , é
- v [ ^ — [ [ CEo % ß f [ [ f b f Z [ [ f W , ð • \ Ž ! , · , é
- vx fšf [ [ f X , l — ñ “ , l , Ý , ð [ s , ç [ [ C .EXE ftj@fCf<, É , í CE< [†, µ, È, ç
- ? or -h f w f < f v , ð • \ Ž ! , · , é
- vd.d Žw'è, ³, ê, ½ Windows fo [ [ f W f † f “ — p , l .EXE ftj@fCf<, ð [i [–, · , é [iv3.1  
, ³ f f f t f H f < f g [ [ B Ž w ' è , Ä , « , é fo [ [ f W f † f “ f l f v f v f † f “ , l Ž Ÿ , l , Æ , “ , è

#### flfvfVf†f“ frfbfg CE<%É

|     |    |                                                                          |
|-----|----|--------------------------------------------------------------------------|
| 3.1 | 32 | Windows 32s , “ , æ, Ñ WinNT 3.1 — p [B “ “ , l “ wCEi, É 3 ŽŸCE³, iŠOŠİ |
| 4.0 | 32 | Windows 95 , “ , æ, Ñ WinNT 3.51 — p [BŠD [F, Å 3 ŽŸCE³, iŠOŠİ           |

## fšf\ [fXfšf“fj, ižg—p—á

šÖ~A€-Ú

žŸ, i—á, í C.RES ftf@fCf<“à, ìšf\ [fX, ð .EXE ftf@fCf<, É€<# , μ, Û, · B

rlink32 <filename>.RES <filename>.EXE

žŸ, i—á, í C2 , Â, ì .RES ftf@fCf<, ðšf“fN, μ, Ä .EXE ftf@fCf<, É€<# , μ, Û, · B

rlink32 -fi<filename>.RES <filename>.RES <filename>.EXE

žŸ, i—á, í C“ü—í .EXE ftf@fCf<“à, ìfvf [fOf%of€fR [fh, É“ü—í .RES ftf@fCf<“à, ìšf\ [fX, ð€<# , μ, Ä C V, μ, ç -¼‘O, ìo—í .EXE ftf@fCf<, ði—, μ, Û, · B

rlink32 -fe<filename>.EXE <filename>.RES <filename>.EXE

žŸ, i—á, í C.RLK fRf}f“fhftf@fCf<, ©, çžwžì, ð“ç, Ýž, Ý C3 , Â, ì .RES ftf@fCf<, ðšf“fN, μ, Ä .EXE ftf@fCf<, É€<# , μ, Û, · B

rlink32 @<filename>.RLK

fRf}f“fhftf@fCf<#i<filename>.RLK#j, ì“à—e, ížŸ, ì, Æ, “, è, Å, · B

-fi<filename>.RES

-fi<filename>.RES

<filename>.RES

<filename>.EXE

## ŠŤŤ [fXfVfFf< iBRC32]

ŠÖ~A [€-Ú] —á

BRC32 ,ÍŠŤŤ [fXfRf“fPfCf%o,]fVfFf<,Á,·BRC32 ,ÍCfRf}f“fhf%oCf“,ì\•¶,É,Á,Ä BRCC32 ,Æ RLINK32 ,ð<N“@,µ,Û,·B

\•¶

brc32 [options] <filename>.RC [<filename>.EXE]

### fRf}f“fhf%oCf“fIvfVfFf“

BRC32 ,ÍŽŸ,]fIvfVfFf“,ðŽó,~“ü,ê,Û,·B

### fIvfVfFf“ à-¾

```

-d<name>=string #IFDEF fvfŠvfVfZfbfTŽw—ß,ÁfefXfg,Á,«,évf“f{f<,ð'è<` , ,é
-fO<filename> .RES ftj@fCf<,ì-¼'O,ð•ìX, , ,é
-fe<filename> .EXE ftj@fCf<,ì-¼'O,ð•ìX, , ,é
-i<path> fCf“fNf< [fhfpfX,É 1 ^È ã,]fffBfCefNfgfŠ,ð'Ç
%oÁ, , ,é i• i“,]è ð †,]fZf~fRf“ , Á<æ∅,é
-r .RES ftj@fCf<,¾, ~, ð ñ ò , , ,é BfRf“fPfCf<,¾, è, ½ .RES ftj@fCf<, í .EXE
,É, í'Ç%oÁ,¾, è, È, †
-v ^—∅Eo%oßf∅fbfZ∅fW,ð•Žì, , ,é
-x fCf“fNf< [fhftj@fCf<,Û, ½,]ŠŤŤ [fXftj@fCf<,]CÉŸ∅ðŽž,É INCLUDE
ŠÁ<«•ì“, ð-¾Ž<, , ,é, æ,xfRf“fPfCf%o,ÉŽwŽì, , ,é
-16 16 frfbfg,ì .RES ftj@fCf<,ð ñ ò , , ,é
-32 32 frfbfg,ì .RES ftj@fCf<,ð ñ ò , , ,é
-vd.d Žw'è,¾, è, ½ Windows fo [fWfFf“í%ož,ì .EXE ftj@fCf<,ð ñ ò , , ,é i-v3.1 , í
16 frfbfgfŠŤŤ [fX,]ffftfHf<fg∅C-v4.0 , í 32 frfbfgfŠŤŤ
∅ [fX,]ffftfHf<fg∅∅Bfo∅ [fWfFf“fIvfVfFf“, Á,]ŽŸ,]•\,]'l, ðŽw'è, Á,«, ,é

```

### fIvfVfFf“ frfbfg C<%oÉ

|     |    |                                                                              |
|-----|----|------------------------------------------------------------------------------|
| 3.1 | 16 | “, ]“wCei,É 3 ŽŸCÉ, ]ŠOŠì∅BWindows 3.1x∅CWindows 32s∅C, ~, æ, Ñ WinNT 3.1 —p |
| 4.0 | 16 | ŠD∅F, Á 3 ŽŸCÉ, ]ŠOŠì∅BWindows 95 , ~, æ, Ñ WinNT 3.51 —p                    |
| 3.1 | 32 | “, ]“wCei,É 3 ŽŸCÉ, Á, È, † ŠOŠì∅BWindows 32s , ~, æ, Ñ WinNT 3.1 —p         |
| 4.0 | 32 | ŠD∅F, Á 3 ŽŸCÉ, ]ŠOŠì∅BWindows 95 , ~, æ, Ñ WinNT 3.51 —p                    |

ŽŸ, ]fIvfVfFf“, ]C-r fIvfVfFf“, ðŽw'è,¾, è, ½,Æ,«,É—LC∅,É,È,è,Û,·B

```

-k .EXE “à,]fZfOf∅f“fg,ÆfŠŤŤ [fX,]~A'±, , ,évfCef∅∅ [fh, ð-
¾C∅,É, , ,é BfZfOf∅f“fg,]C.DEFE ftj@fCf<“à,]∅ † ~ , ð•ÛŽ∅,¾, è, é i, ±
,]fIvfVfFf“, í 16 frfbfgfŠŤŤ [fX,É,]Y“K—p,¾, è, é
-t fvf∅fefNfgf,∅ [fh∅iWindows ,]fXf^f“f_∅ [fh, ~, æ, Ñ 386
fGf“fnf“fXfgf,∅ [fh∅j,¾, ~, ÁŽÀ∅s,¾, è, éfAvfŠfP∅ [fVfFf“, ð ñ ò , , ,é

```

%o^ÊŒÝŠ·□<

ŽŸ,ì□\•¶,Æfjfvfj#f“,í□C%o^ÊŒÝŠ·□<,ì,½,ß,É—p^Ó,³,ê,Ä,ç,Ü,·□B

□\•¶

brc [switches] <filename>.RC [<filename>.EXE]

**fRf}f“fhf%ofCf“fjfvfj#f“**

BRC ,íŽŸ,ìfjfvfj#f“,ðŽó,~“ü,ê,Ü,·□B

**fjfvfj#f“** □à-¾

---

-31 Windows 3.1 ŒÝŠ·,ì .RES ftj@fCf<,ð□i□-,·,é

-w32 Win32 ŒÝŠ·,ì .RES ,ð□i□-,·,é

## fšf [fXfvFf<,ižg—p—á

ŠÖ~A□€-Ú

ŽŸ,lfRf}f“fhf%oFcf“,í□C.RC ftf@fCf<,đfRf“fpfCf<,μ,Ä .RES ftf@fCf<,đ□i□¬,μ□C,» ,ì .RES ftf@fCf<,đŽÀ□sCE`Ž@ftf@fCf<,É'Ç%oÁ,μ,Ü,·□B

brc32 <filename>.RC [<filename>.EXE]

BRC32 ,í□C.RC ftf@fCf<,Æ“¬-¼,ì .EXE ftf@fCf<,đŽ©“®“l,É'T,μ,Ü,·□B.EXE ftf@fCf<,ì-¼'O,ª .RC ftf@fCf<,Æ^Ü,È,é□ê□‡,¾,¬□C.EXE ftf@fCf<,ì-¼'O,đŽw'è,·é•K—v,ª, ,è,Ü,·□B

ŽŸ,ì—á,í□C.RES ftf@fCf<,đ□i□¬,μ,Ü,·ª .EXE ftf@fCf<,É'Ç%oÁ,μ,Ü,¹,ñ□BfRf}f“fhf%oFcf“,É .EXE ftf@fCf<,ì-¼'O,đŽw'è,μ,Ä,à-³Ž<,³,é,Ü,·□B

brc32 -r <filename>.RC

ŽŸ,ì—á,í□CŠù'¶,ì .RES ftf@fCf<,đŽÀ□sCE`Ž@ftf@fCf<,É'Ç%oÁ,μ,Ü,·□B.EXE ftf@fCf<,ì-¼'O,í□C.RES ftf@fCf<,ì-¼'O,Æ^Ü,È,é,Æ,« ,É,ì,Ÿ•K—v,Ä,·□B

brc32 <filename>.RES [<filename>.EXE]

ŽŸ,ì—á,Ä,í□CBRC32 ,đŽg,Á,Ä Windows 3.1 CEÝŠ·,ì 16 frfbfg,ì .RES ftf@fCf<,đ□i□¬,μ,Ü,·□B

brc32 -16 -v3.1 -fo<filename>.RES <filename>.RC



## TDUMP [options] [inputfile] [listfile]

TDUMP.EXE, [options] [inputfile] [listfile]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

TDUMP [options] [inputfile] [listfile] [options]

### TDUMP [options]

TDUMP [options] [inputfile] [listfile]

TDUMP [options] [inputfile] [listfile] [options]

<Inputfile> [inputfile]

<Listfile> [listfile]

<options> "C^O, TDUMP [options] [inputfile] [listfile]

^O: TDUMP [options] [inputfile] [listfile] [options]

## TDUMP frf}f“fhf%ofCf“flfvVf#f“

TDUMP ,Å,í,ç,,Å, ©,lfifvfVf#f“□i□È—ª%oÅ“\  
□j,ðŽw'è,Å,«,Ü,□B,·,x,Å,lfifvfVf#f“ ,lfnfCftf“ ,Ü,½,lfXf%ofbfVf...,ÅŽn,Ü,è,Ü,□B^È%o,ì 2 ,Å,ì—  
á,í““™,Å,□B

```
TDUMP -el -v demo.exe
TDUMP /el /v demo.exe
```

### -a ,Æ -a7 flfvVf#f“

TDUMP ,iftf@fCf<,ìŽí—p,É%ž,¶,ÅŽ©“@“l,É□o—í•Žì,ð²□β,μ,Ü,□B-a ,Ü,½,í -a7  
flfvVf#f“ ,ðŽw'è,·,é,Æftf@fCf<,ðfefLfXfgE`Ž®,Å•Žì,³,é□CflftfZfbfg,Æ“à—e,ª ASCII •¶Žš,Å•\  
Žì,³,è,Ü,□B•Žì,Å,«,É,ç•¶Žš□i□\$Eä•¶Žš,È,Ç□j,lfsfšflfh,Å•Žì,³,è,Ü,□B

-a ,ðŽw'è,·,é,Æftf@fCf<,ðfefLfXfgE`Ž®,Å•Žì,³,é□CflftfZfbfg,Æ“à—e,ª ASCII •¶Žš,Å•\  
Žì,³,è,Ü,□B•Žì,Å,«,É,ç•¶Žš□i□\$Eä•¶Žš,È,Ç□j,lfsfšflfh,Å•Žì,³,è,Ü,□B

-a7 ,ðŽw'è,·,é,Æ□ã^È ASCII •¶Žš,ª%o^È ASCII •¶Žš,É•iš,³,è,Ü,□B,±  
,é,í□Cf\_f“fv†,iftf@fCf<,ª□ã^È ASCII •¶Žš,ðftf%ofO,Æ,μ,Å□Y'è,·,é□è□#,É•Ö—~,Å,□iWordStar  
,ì<@“\□□B

-j- flfvVf#f“ ,ðŽw'è,μ,Å,ç,é□è□#,í□C20H ,©,ç 7EH ,Ü,Å,ì”¼šp•¶Žš^ÈŠO,í□h.□h,Å•\  
Žì,³,è,Ü,□B

### -b# flfvVf#f“

-b# flfvVf#f“ ,ðŽw'è,·,é,Æ□CŽw'è,μ,½flftfZfbfg,ÅŽn,Ü,é□î•ň,ð•\  
Žì,Å,«,Ü,□B,½,Æ,í,í□CflftfZfbfg 100 ,©,çŽn,Ü,é MYFILE ,lf\_f“fv,ª•K—v,È□è□#,íŽŸ,ì,æ,ª  
,ÉŽw'è,μ,Ü,□B

```
TDUMP -b100 MYFILE
```

### -d flfvVf#f“

-d flfvVf#f“ ,ðŽw'è,·,é,Æ□C.OBJ ftf@fCf<,ì Borland 32 frfbfgffofbfO□î•ň,ªf\_f“fv,³,è,Ü,□B,±  
,lfifvfVf#f“ ,ðŽw'è,μ,È,ç□è□#□C□¶,lf□[f^,¾,¯,ª•Žì,³,è,Ü,□B

### -e□C-el□C-er□C,“,æ,Ñ -ex flfvVf#f“

,±,è,ç 4 ,Å,lfifvfVf#f“ ,ðŽw'è,·,é,Æ□Cftf@fCf<,íŽÀ□sE`Ž®□i.EXE□jftf@fCf<,Æ,μ,Å•\  
Žì,³,è,Ü,□B

.EXE ftf@fCf<,ì•Žì,Å,í□CflfyfE□[fefBf“fOfVfXfef€

,ªftf@fCf<,lf□□[fhŽž,ÉŽg,xfyf@fCf<“à,í□î•ň,ª•Žì,³,è,Ü,□Bfvf“f{f<ffofbfO□î•ň,ª ,é□è□#,í,»,è,à  
•Žì,³,è,Ü,□iTurbo Debugger ,Ü,½,í Microsoft CodeView□□B

TDUMP ,í DOS ,íŽÀ□sE`Ž®ftf@fCf<□C□V,μ,çE`Ž®,íŽÀ□sE`Ž®ftf@fCf<□iMicrosoft  
Windows ,Æ OS/2 ,ì.EXE ,Æ .DLL ftf@fCf<□□CfšfjfAŽÀ□sE`Ž®ftf@fCf<□CLE E`Ž®□C,“,æ,Ñ  
Windows NT ,Æ Windows 95 ,ÅŽg,í,è,Å,ç,é^Ú□A□«,í□,çŽÀ□sE`Ž®□iPE□jftf@fCf<,í□î•ň,ð•\  
Žì,μ,Ü,□B

- -el ,í□s“Ô□†,ì•Žì,ð—}□\$,·,é
- -er ,lfšf□P□[fvf#f“fe□[fuf<,ð•Žì,μ,È,ç
- -ex ,í□V,μ,çE`Ž®,íŽÀ□sE`Ž®ftf@fCf<,í□î•ň,ð•\Žì,μ,È,ç□B,Å,Ü,è□CDOS ,lfXf^fufvf□fOf  
%of€,í□î•ň,¾,¯,ª•Žì,³,è,é

### -h flfvVf#f“

-h flfvVf#f“ ,ðŽw'è,·,é,Æ□Cf\_f“fvftf@fCf<,ª 16 □iE`Ž®,Å•Žì,³,è,Ü,□B16 □iE`Ž®,í 1 E...

,lflftfZfbfg'íC16 CE...ì 16 òi"òC,,"æ,Ñ'í%øž,·,é ASCII •¶Žš,Åòñ,³,è,Ü,·òB•\Ž,Å,«,È,ç ASCII •¶Žš,ífsfšfjfh,Å•\Ž,³,è,Ü,·òB

TDUMP ,a"ü—íftf@fCf<,ìŠg'£Žq,ð"FŽ˘,Å,«,È,çêê#òCftf@fCf<,í 16 òiCE`Ž®,Å•\ Ž,³,è,Ü,·òi,Ü,©,ìCE`Ž®,aŽw'è,³,è,Å,ç,È,çêê#òjòB

-j- flfvfVf#f" ,ðŽw'è,µ,Å,ç,éêê#í,òC20H ,©,ç 7EH ,Ü,Å,ì"¼Šp•¶Žš^ÈŠO,íh.òh,Å•\ Ž,³,è,Ü,·òB

**-j- flfvfVf#f"**

-j- flfvfVf#f" ,ðŽw'è,·,é,ÆòC-h flfvfVf#f" ,ðŽw'è,µ,½òêê#òC,Ü,½,í .OBJ ,â .LIB ftf@fCf<,ì ASCII f\_f"fv,ðòs,Å,½òêê#í,È,òC20H ,©,ç 7EH ,Ü,Å,ì"¼Šp•¶Žš^ÈŠO,íh.òh,Å•\ Ž,³,è,Ü,·òBffftfHf'fg,Å,òC'SŠp•¶Žš,í'SŠp•¶Žš,ì,Ü,Ü•\Ž,³,è,Ü,·òB

**-l ,Æ -li flfvfVf#f"**

-l flfvfVf#f" ,ðŽw'è,·,é,ÆòCò—íftf@fCf<,a%òfCfuf%òfŠòi.LIBòjftf@fCf<CE`Ž®,Å•\Ž,³,è,Ü,·òBf %òfCfuf%òfŠftf@fCf<,íflfufWfFfNfgftf@fCf<òiòUòx,íòC-o flfvfVf#f" ,ðŽQòÆòj,ìòWò#í,Å,·òBf %òfCfuf%òfŠftf@fCf<,í\_f"fv,Å,íòCf%òfCfuf%òfŠCEÅ— L,òi•ñòCflfufWfFfNfgftf@fCf<òC,,"æ,ÑflfufWfFfNfgftf@fCf<"à,ífCEfRò[fh,a•\Ž,³,è,Ü,·òB

-li flfvfVf#f" ,ðŽw'è,·,é,ÆòCfCf"fìò[fgf%òfCfuf%òfŠ,í\_f"fvŽž,É impdef fCEfRò[fh,ì'ZòkCE` ,a•\ Ž,³,è,Ü,·òBCEŸòð•¶Žš—ñ,ðŽw'è,·,éò\•¶,íŽŸ,ì,Æ," ,è,Å,·òB

-li=<string>

,½,Æ,ì,îŽŸ,íRf}f"fh,ðŽg,æ,òC

TDUMP -li=codeptr import.lib

ŽŸ,ì,æ,æ,Éòo—í,³,è,Ü,·òB

Impdef:(ord) KERNAL.0336=ISBADCODEPTR

,±,ìòo—í,Å,ìòCŠÖò",aò#ò~ò",ÅfGfNfXfjò[fg,³,è,é,±,Æ,aŽ,³,è,Å,ç,Ü,·òB,±,ìòêò#í,òò#ò~ò",í 336òi10 òi"òj,Å,òB,³,ç,ÉòC,±,ìòo—í,Å,íf,fWf...ò[f<,ÆŠÖò"-¼,a•\Ž,³,è,Ü,·òB

ŽŸ,íRf}f"fh,Å,òC

TDUMP -li=walk import32.lib

ŽŸ,ì,æ,æ,É•\Ž,³,è,Ü,·òB

Impdef:(name) KERNEL32.????=HEAPWALK

,±,è,ìòC-¼'O,ÅfGfNfXfjò[fg,³,è,½ŠÖò",ìòo—í,ðŽž,ì,µ,Ü,·òB

**-m flfvfVf#f"**

-m flfvfVf#f" ,ðŽw'è,·,é,ÆòCflfufWfFfNfgftf@fCf<òCŽÀòsCE`Ž®ftf@fCf<òC,,"æ,Ñ Turbo Debugger fv"f{f<òi•ñftf@fCf<,ì C++ ,ì-¼'O,ì•ìCE` ,³,è,½,Ü,Ü,Å,·òB,±,íflfvfVf#f" ,í C++ fRf"fpfCf%ò,ìŽw'è,³,è,½ŠÖò",Æ,» ,ì^ò",É'í,·,é•ìCE`•û-@,ðCE^,ß,é,Æ,« ,É•Ö—~ ,Å,òB

**-oòC-ocòC-oxòC,,"æ,Ñ -oi flfvfVf#f"**

-o ,ðŽw'è,·,é,ÆòCftf@fCf<,íflfufWfFfNfgòi.OBJòjftf@fCf<,Æ,µ,Å•\ Ž,³,è,Ü,·òBflfufWfFfNfgftf@fCf<,ì•\ Ž,É,íSf"fj,ÉfRf}f"fh,Æffò[f^ ,ð"n ,fRf}f"fhfCEfRò[fh,ì<Lòq,aŠÜ,Ü,èòC.EXE ftf@fCf<,ìòiò~òû-

@,đžwž!,μ,Ü,·□B,±,ì•\Ž!CE`Ž®,í□CšefCEfR□[fh,ÆfCEfR□[fh'P^Ê,ì'í%ž,μ,½ff□[f^,đž!,μ,Ü,·□B

-oc ,đžw'è,·,é,Æ□CTDUMP

,íCE©,Á,©,Á,½šefCEfR□[fh,É'í,μ,Ä□,,%ň□ç'·CEŸ□,□iCRC□j,đžÀ□s,μ,Ü,·□B,±,ì•\Ž!•û-  
@,í□CSÓ^á,Á,½ CRC f'fFbfN,³CE©,Á,©,Á,½□é□‡,í,Ÿ -o ,ì•\Ž!•û-@,Æ^U,È,è,Ü,·□BTDUMP  
CRC ,ì'í,ífCEfR□[fh,ì CRC fojCfj,Æ,í'U,È,è,Ü,·□B

-ox<id> ,ífufWfFfNfgf,fWf...□[f<f'fv,©,çžw'è,μ,½Ží—p,ífCEfR□[fh,đ□œšO,μ,Ü,·□B<id>  
,É,í•\Ž!,μ,È,čfCEfR□[fh-¼,đžw'è,μ,Ü,·□B,½,Æ,í,ÌŽŸ,ífRf}f"fh,í□C

TDUMP -oxPUBDEF MYMODULE.OBJ

PUBDEF fCEfR□[fh,đ□œšO,μ,½ MYMODULE.OBJ ,ífufWfFfNfgf,fWf...□[f<,đ•\Ž!,μ,Ü,·□B

-oi<id> ,Á,í□Cžw'è,μ,½Ží—p,ífCEfR□[fh,¾,¯,²ífufWfFfNfgf,fWf...□[f<,ÉšÜ,Ü,è,Ü,·□B<id>  
,É,í•\Ž!,·,éfCEfR□[fh-¼,đžw'è,μ,Ü,·□B,½,Æ,í,ÌŽŸ,ífRf}f"fh,í□C

TDUMP -oiPUBDEF MYMODULE.OBJ

PUBDEF fCEfR□[fh,¾,¯,đ•\Ž!,·,é MYMODULE.OBJ ,ífufWfFfNfgf,fWf...□[f<,đ•\Ž!,μ,Ü,·□B

-ox ,Æ -oi fífVfVf‡",í□Cfšf"fnŽž,É"□¶,·,éfGf%□[,đCE©,Á,¯,é,Æ,«,É•Ö—~ ,Á,·□BEXTDEF  
fVf"ff<,Æ PUBDEF fVf"ff<,ífXfyf<,â'â•¶Žš,Æ□—•¶Žš,ì<æ•É,đ'²,x,é,±  
,Æ,É,æ,Á,Ä□Cfšf"fn,ÉšÖ,·,é'½,,ì-â'è,đ

%đCE^,Á,«,Ü,·□B,½,Æ,í,ífšf"j,©,čf□bfZ□[fW□unresolved external□v,³\  
Ž!,³,è,½□é□‡,É,í□CTDUMP -oiEXTDEF ,đžg,Á,ÁfGf%□[,ì□¶,¶,éf,fWf...□[f<,ìšO•""è<` ,đ•\  
Ž!,μ□CŽŸ,Éfšf"j,Æ"K□‡,μ,È,čfpufšfNfVf"ff{f<,đšÜ,pf,fWf...□[f<,Á TDUMP -oiPUBDEF ,đžg,č  
,Ü,·□B

-oi fífVfVf‡",ì,à,π^è,Á,Ìžg,č•ù,í□C"Á'è,íf,fWf...□[f<,É□¶□—,³,è,½fZfOf□f"fg,ì-  
¼'O,ÆfTfCfY,đCEŸ□,,·,é,±,Æ,Á,·□B,½,Æ,í,ÌŽŸ,ífRf}f"fh,í□C

TDUMP -oiSEGDEF MYMODULE.OBJ

MYMODULE ,ì,·,x,Á,ífZfOf□f"fg,ì-¼'O□C'@□«□C,¯,æ,ŃfTfCfY,đ•\Ž!,μ,Ü,·□B

'□^Ó: -oi ,Æ -ox ,ífCEfR□[fh,Ìží—p,ífšXfg,đ•\Ž!,·,é,É,í□CfRf}f"fhf%□Cf"ífVfVf‡" -oi? ,Æ -  
ox? ,đžg,č,Ü,·□B

**-R fífVfVf‡"**

-R fífVfVf‡",đžw'è,·,é,Æ□CTDUMP ,í 32 frfbfg

PE□iWin32□jCE`Ž®,ífCf□□[fW,©,čfšf□fP□[fVf‡"fe□[fuf<,đf\_f"fv,μ,Ü,·□BffftfHf<fg,Á,íf\_f"fv,í  
—}□š,³,è,Ü,·□B

**-v fífVfVf‡"**

-v fífVfVf‡",í□Ú□x•\Ž!—p,Éžg,í,è,Ü,·□B.OBJ ,Ü,½,í .LIB

ftf@fCf<,Æ^è□□,Éžg,í,è,é,Æ□CTDUMP ,ífCEfR□[fh,ì"à—e,ì 16  
□iCE`Ž®,Áf\_f"fv,μ,Ü,·□ifCEfR□[fh,É,Á,č,Á,ífRf□f"fg,È,μ□j□B

TDUMP ,đ Turbo Debugger ,ífVf"ff{f<fe□[fuf<,É'í,μ,Äžg,π

,Æ□CE©,Á,©,Á,½□‡~ ,Á□î•ñfe□[fuf<,³•\Ž!,³,è,Ü,·□BTDUMP

,í•i□",íf□[fuf<,©,ç,ì□î•ñ,đCE<□‡,μ,È,č,Á□Cf,fWf...□[f<'P^Ê,Á^Ó—j,ì ,é•\Ž!,đ□s,č,Ü,·□B

## TLINK32 , ,æ,Ñ ILINK32 ,İžg,ç•û

ŠÖ~A□€-Ú

TLINK32 , ,æ,Ñ ILINK32 ,íCfIfufWfFfNfgf,fWf...□[f<□i.OB] ftf@fCf<□j□Cf%ofCfuf%ofŠf,fWf...  
□[f<□i.LIB ftf@fCf<□j□C, ,æ,ÑfŠf□[fX,đCE<□ž,μ,Ä□CŽÄ□sCE`Ž®ftf@fCf<□i.EXE  
,Æ .DLL□j,đ□i□-, ,éRf}f“fhf%ofCf“fc□[f<,Å,·□BfŠf“fj,ÍRf“fpfCf%  
,©,çŽ““®“l,ÉCEÄ,Ñ□o,<sup>3</sup>,é,é,ì,Å□CfRf“fpfCf<,Å,ÍfŠf“fN’iŠK,đ—}□š,μ,Ä,ç,È,ç□é□ž,í□CfŠf“fj,đ-  
¾Ž|“l,ÉŽg,æ•K—v,í, ,è,Ü,<sup>1</sup>,ñ□i-c fRf“fpfCf%oflfvVfžf“,đŽQ□Æ,μ,Ä,,¾,<sup>3</sup>,ç□j□B

TLINK32 , ,æ,Ñ ILINK32 ,ÍRf}f“fhf%ofCf“, ©,ç<N“®,<sup>3</sup>,é□CfIfufWfFfNfgf,fWf...□[f<□Cf%ofCfuf  
%ofŠ□CfŠf□[fX,đfŠf“fN,μ,ÄŽÄ□sCE`Ž®ftf@fCf<,đ□i□-, ,é,¾,ß,É□CTLINK32.CFG□iLINK32 ,í  
ILINK32.CFG ,đŽg—p□j,Æ,ç,æŠÄ<<□Ýèftf@fCf<□CfIfvVfžf“,ÍfCEfXf|  
f“fXftf@fCf<□C, ,æ,ÑfRf}f“fhf%ofCf“flfvVfžf“,đfŠf“fN,μ,Ü,·□B

TLINK32 , ,æ,Ñ ILINK32 ,í 32 frfbfg Windows fR□[fh,đfŠf“fN,μ□C32 frfbfgfŠf□[fXfŠf“fj  
RLINK32.DLL ,đŽg,ç,Ü,·□B

# ILINK32 FfCf"fnfŠf" f^f·fŠf" fj

ŠÖ~A€-Ú

ILINK32 ,Í CTLINK32 ,Æ" ^,¶,æ,æ,É CflfufWfFfNfgf,fWf... [f<□i.OBJ ftf@fCf<□j□Cf%ofCfuf %ofŠf,fWf... [f<□i.LIB ftf@fCf<□j□C, " ,æ,ŃfŠf^ [fX,đfŠf"fn,μ,ĀŽĀ□sCE`Ž@ftf@fCf<□i.EXE ; ,æ,Ń .DLL□j,đ□□- ,μ,Ū, □BTLINK32 ,Æ,î^á,č,Í CILINK32 ,afŠf" fj□ó' Őftf@fCf<,đŽg,Ā,Ā' O %oň,lfŠf"fnfCf□□fW,đfŠf"fn, ,é,½,β□CfŠf"fn□^ -□,ìžžŠÖ,á'â•□,É'Z□k,³,é,Ū, □B

## ILINK32 ,Æ TLINK32 ,î^á,č

ILINK32 ,Æ TLINK32 ,Í,Ç,ž,ç,à 32 frfbfgŽĀ□sCE`Ž@ftf@fCf<,đ□□- ,μ,Ū, ,æ□C^Ū,È,é" \_ ,ª,č, - ,Ā,©, ,è,Ū, □B

### fŠf" fj□ó' Őftf@fCf<

fV□fWfFfNfg,ì□'z,đ□%o,β,Ā□s,æ,Æ,«□CILINK32 ,í 4 ,Ā,ì'Ç,Ý□o,μ□è- p,lfŠf" fj□ó' Őftf@fCf<,đ□□- ,μ,Ā□CfV□fWfFfNfg,ì .OBJ □í•ň,Æ .LIB □í•ň,đŠi" [ ,μ,Ū, □BŽŸ,É" ^ ,¶fV□fWfFfNfg,đ□'z,Ū,½,lf□fCfN, ,é,Æ,« ,É,Í CILINK32 ,lfŠf" fj□ó' Őftf@fCf<,đ"Ç,Ý□o,μ,ĀfV□fWfFfNfg,lfŠf"fn,É, ©, ©,éžžŠÖ,đ'Z□k,μ,Ū, □B

fŠf" fj□ó' Őftf@fCf<,ì-¼' O, í <fV□fWfFfNfg-¼> .IL? ,Ā, □B <fV□fWfFfNfg-¼> ,lfV□fWfFfNfg,ì .MAK ftf@fCf<,Æ" ^,¶,Ā□C? ,î^É'u,É,Í C4 ,Ā,lfŠf" fj□ó' Őftf@fCf<,đ<æ•É, ,é•¶Žš,á"ù,è,Ū, □B

ffftfHf<fg,Ā,Í CC++Builder ,Í□%o,β,Āf□□[fh,³,é,½,Æ,« ,Éž © " @ " I,ÉfŠf" fj□ó' Őftf@fCf<,Í □%SúfZfbfg,đ□□- ,μ,Ā□CC++Builder ,í BIN ffbfCefNfgfŠ,ÉŠi" [ ,μ,Ū, □BffftfHf<fg,lfŠf" fj□ó' Őftf@fCf<,đ□Ā¶□- , ,é•K-v,ª, ,é□è□‡,Í CC+ +Builder ,lfRf} } "fhf%ofCf" flfVfVf" -deflink ,đŽw'è, ,é,Í CC++Builder ,lf□□[fhžž,ÉfŠf" fj□ó' Őftf@fCf<,đ□□- ,μ,Ū, □B

### fffofbfOî•ňftf@fCf<

□Ā□" I,ÈŽĀ□sCE`Ž@ftf@fCf<,ÉfffofbfOî•ň,đŠŪ,β,é□è□‡□CILINK32 ,í•K, ,é•ĀĀ,ì .TDS ftf@fCf<□iffftfHf<fg,í <fV□fWfFfNfg-¼> .TDS□j,ÉfffofbfOî•ň,đŠi" [ ,μ,Ū, □BC++Builder ,í" □□‡fffofbfK,Æ Turbo Debugger ,Í,Ç,ž,ç,à,±,lfffofbfOî•ňftf@fCf<,đŽg-p,μ,Ū, □B

### fŠf" fjfXfCfbf`

ILINK32 ,Í CTLINK32 ,ì,Ū,Æ,ň,Ç,lfXfCfbf` ,đfTf|□[fg,μ,Ā,č,Ū, □BILINK32 ,í^È %oº,lfŠf" fjfXfCfbf` ,đfTf|□[fg,μ,Ā,č,Ū,¹,ň□B

- /Enn fGf%□[ ,íĀ'ā□
- /Gx "ňí'tfe□[fuf<fXfCfbf`
- /n fffftfHf<fgf%ofCfuf%ofŠ,ì-³CEø%o»
- /o □~□" I,ĀfCf" f|□[fg
- /P fR□[fhfZfOf□f" fg,lfpfbfN
- /r □^ -□CEo%oβ•\Ž!

ILINK32 ,Í CTLINK32 ,É,Í,È,čŽŸ,lfXfCfbf` ,đfTf|□[fg,μ,Ā,č,Ū, □B

- /C fŠf"fn,ì' O,ÉfŠf" fj□ó' Őftf@fCf<,đ, ,x,Ā□í□œ, ,é
- /t fŠf"fnžžŠÖ,ì•\Ž!

# TLINK32 ,Æ ILINK32 ,İfRf}f“fhf%oCf“ ,İ\•¶

fŠf“fj\•¶,İfŠf“fj,İ□^—□•û-@,đ□\$CEä,μ,Ü,·□BfŠf“fjR,İf}f“fhf  
%oCf“fİfVfVf#f“,İ’ă•¶Žš,Æ□-•¶Žš,ă<æ•É,³,ê,Ü,·□B“Á,ÉŽw’è,ª,É,¢CEÀ,è□CTLINK32 ,İ-½—  
ß,ÆfİfVfVf#f“,İ ILINK32 ,É,à“K—p,³,ê,Ü,·□B

fŠf“fj,İ□C’É□İ,İfRf}f“fhf%oCf“,Á“ü—İ,·,éİfVfVf#f“,İ,©,İ,è,É TLINK32.CFG ,Æ,¢  
,æŠÁ<«□Y’èftf@fCf<,àŽg,İ,Ü,·□B

## İ\•¶

TLINK32 | ILINK32 [@respfile][options] startup myobjs, [exe], [mapfile],  
[libraries], [deffile], [resfile]

|             |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [@respfile] | fCEfXfİf“fXftf@fCf<,İ□C’É□İ,İfRf}f“fhf%oCf“,É“ü—<br>İ,·,éfŠf“fjİfVfVf#f“,Æftf@fCf<-<br>¼,İfŠfXfg,đŠÜ,İfefİfXfgftf@fCf<□BfİfVfVf#f“,Æftf@fCf<-¼,đfCEfXfİf<br>f“fXftf@fCf<,É<L□q,·,é,Æ□CfAfVfSfP□İfVf#f“,đfŠf“fN,·,é,½,ß,İfL□İfXf<br>gf□□İfN,đ□È,·,é                                                                                                                                                                  |
| [options]   | fŠf“fj,İ□^—□•û-@,đ□\$CEä,·,éfŠf“fjİfVfVf#f“□B,½,Æ,İ,İ□CfİfVfVf#f“,Á<br>.EXE ftf@fCf<,đ□□-·,·,é,İ,© DLL<br>ftf@fCf<,đ□□-·,·,é,İ,©,đŽw’è,·,é□BfŠf“fjİfVfVf#f“,İ’O,É•K, ,fXf<br>%ofbVf...□İ/□j,Ü,½,İfnfCftf“□İ-□j,đ•t,·,é                                                                                                                                                                                              |
| startup     | ŠeŽİ,İfVf□fOf%of€fZfOf□f“fg,İ□#□~ ,đŠÇ—□,μ,Ä,¢<br>,éŽÀ□sCE`Ž@ftf@fCf<,Ü,½,İ DLL ftf@fCf<,İ,½,ß,İf{□[İf%of“fh,İ□<br>%oŠú%o»f,fWf...□[İf<□B“K□Ø,É□%oŠú%o»f,fWf...□[İf<,đfŠf“fN,μ,É,¢<br>,Æ□C’É□İ□CŽ`•ÉŽq,ª<br>%ođCE^ ,Á,« ,É,¢□CfXf^fbfN,ª□İ□- ,³,ê,È,©,Á,½□C,É,Ç,Æ,¢,æ“à—<br>e,đ•ñ□□,·,é□“½,İfGf%o□[İf□fbfZ□[fW,ª•Žİ,³,ê,é                                                                                           |
| myobjs      | fŠf“fN,·,é .OBJ<br>ftf@fCf<□BfİfCEf“fgffBfCEfNfgfŠ`ÈŠO,É, ,éftf@fCf<,É,İfpfX,đŽw’è,·,<br>é□Bftf@fCf<,İŠg’£Žq,ªŽw’è,³,ê,Á,¢,É,¢□é□#□CfŠf“fj,İŠg’£Žq .OBJ<br>,đ•t%oÁ,·,é                                                                                                                                                                                                                                              |
| [exe]       | ŽÀ□sCE`Ž@ftf@fCf<□İ.COM□C.EXE□C,Ü,½,İ .DLL□j,É•t,·,é-<br>¼’O□BŽÀ□sCE`Ž@ftf@fCf<-¼,đ□È—ª,·,é,Æ□CTLINK ,É,æ,è□Á□%o<br>,İfİfufWfFfNfgftf@fCf<-¼,É .EXE ,Ü,½,İ .DLL ,ª•t<br>%oÁ,³,ê,ÄŽÀ□sCE`Ž@ftf@fCf<,İ-¼’O,ªCE^ ,Ü,é□B□İTLINK<br>,İ□CŠg’£Žq,ª,É,¢ŽÀ□sCE`Ž@ftf@fCf<,É’İ,μ,Ä .EXE<br>Šg’£Žq,đ’z’è,Ü,½,İ•t<br>%oÁ,·,é□B,Ü,½□CŠg’£Žq,ª,É,¢f_fCfİf~fbfNfŠf“fNf%ofCfuf<br>%ofŠ,É’İ,μ,Ä,İ .DLL Šg’£Žq,đ’z’è,Ü,½,İ•t%oÁ,·,é□j |
| [mapfile]   | f}fbfVftf@fCf<,É•t,·,é-¼’O□B-¼’O,đ□È—ª,·,é,Æ□Cf}fbfVftf@fCf<-<br>¼,İŽÀ□sCE`Ž@ftf@fCf<,Æ“·,¶•û-<br>@,ÁCE^ ,Ü,é□İ,½,¾,μ□CŠg’£Žq .MAP ,ª•t<br>%oÁ,³,ê,é□jBftf@fCf<,İŠg’£Žq,ªŽw’è,³,ê,Á,¢<br>,É,¢□é□#□CfŠf“fj,İŠg’£Žq .MAP ,đ•t%oÁ,·,é                                                                                                                                                                                  |
| [libraries] | fŠf“fNŽž,ÉŽæ,è□ž,pf%ofCfuf%ofŠftf@fCf<□Bfİf“f},đŽg,Á,ÄfŠfXfg,İf<br>%ofCfuf<br>%ofŠ,đ<æ□Ø,ç,É,¢□Bftf@fCf<,ªfİfCEf“fgffBfCEfNfgfŠ,Ü,½,İfT□İf`fpf<br>X□İ/L fİfVfVf#f“,đŽQ□Æ□j,É,É,¢□é□#□CfŠf“fN•¶,ÉfpfX,đ<L□q,·,é•K—<br>v,ª, ,é□Bftf@fCf<Šg’£Žq,ªŽw’è,³,ê,Á,¢<br>,É,¢□é□#□CfŠf“fj,İŠg’£Žq .LIB ,đ•t%oÁ,·,é                                                                                                             |

fŠfXfg,Ā,lf%ofCfuf%ofŠ,ì#~ ,í,Æ,Ā,àd—v,ĀC^È%º,ì^è—  
,É'è<` ,³,è,Ā,ç,é#”Ō,ĀŽg,í,ê,Û,·B

- Code Guard f%ofCfuf%ofŠi•K—v,Èê#j
- "C^Ó,lf+[]fU[]f%ofCfuf%ofŠ,ð^è—•\Ž!,μCŠÖ",ª 2 %ºñ^Èä'è<` ,³,è,Ā,ç,è,í'm,ç,¹,éBfŠf"jj,íĀ%º,ÉCE©,Ā,©,Ā,½'è<` ,ðŽg,κ
- DOS f[]fo[]fCEfC,ð[]i—,μ,Ā,ç,éê#CDOS f[]fo[]fCEfCf,fWf...[]f< OVERLAY.LIB,ðfšf"fN,·,é
- DPMI f%ofCfuf%ofŠiDOS DPMI fAfvfŠfP[]fVf+f",ì,Ýj
- IMPORT.LIBiWindows API ,ðŽg,κŽÀ[]sCE`Ž®,ð[]i—,μ,Ā,ç,éê#j
- ""'l%ººŽZf%ofCfuf%ofŠi•K—v,Èê#j
- f[]f,fŠf,fff<,Æfvf%ofbfgjtfH[]f€,É'í%ºž,μ,½f%of"f^fCf€f%ofCfuf%ofŠ

[deffile] Windows ŽÀ[]sCE`Ž®ftf@fCf<,lf,fWf...[]f<'è<`ftf@fCf<[]Bf,fWf...  
[]f<'è<`i.DEF[]jtf@fCf<,ð[]È—ª,μ,Ā /Twe flfvfVf+f",â /Twd  
flfvfVf+f",ðŽg,κ,Æ[]CfŠf"jj,lfjtfHf<fg[]Y'è,ÉŠî,Ā,ç  
,ĀfAfvfŠfP[]fVf+f",ð[]i—,·,éBfŠf"jj,ÍŠg'£Žq,ª,È,ç[]ê#  
[]CŠg'£Žq .DEF ,ð•t%ºĀ,·,é

[resfile] ŽÀ[]sCE`Ž®ftf@fCf<,ÉCE<[]#,,é .RES ftf@fCf<[]fRf"fpfCf<  
,³,è,½fŠf\  
[]fXftf@fCf<[]j,lfŠfXfg[]BfŠf"jj,ÍŠg'£Žq,ª,È,ç[]ê#[]CŠg'£Žq .RES  
,ð•t%ºĀ,·,é



## TLINK32.CFG ftj@fCf<

TLINK32 ,íC'ÊíCfRf}f"fhf%ofCf" ,Å"ü—í, ,élfvfVf+f" ,ì, © ,í, è, É TLINK32.CFG ,Æ, ç  
,xŠÂ<<Y'èftj@fCf<, ðŽg, ç, Ü, .iŠÂ<<Y'èftj@fCf<, É, lfvfVf+f" ,ì, Y, ðŽw'è, Å, <Cftj@fCf<-  
¼, ÍŽw'è, Å, <, È, ç, ±, Æ, É' ^ Ó, μ, Å, ,¾,¾,¾, çjBŠÂ<<Y'èftj@fCf<, ð—p, ç  
, é, Æ•p"É, ÉŽg, xlfvfVf+f" , ð•Ü'¶, Å, <C" , ¶lfvfVf+f" , ðCEJ, è•Ö, μÅ"ü—í, ., é•K—v,ª, È, , È, è, Ü, .B

TLINK32 ,í TLINK32.CFG ,ð, Ü, ,ffjCef"fgfffBfCefNfgfŠ, Å'T, μCŽŸ, É TLINK32  
, ãf[fh,³, ê, ½fffBfCefNfgfŠ, Å'T, μ, Ü, .B

TLINK32.CFG ftj@fCf<,ª^È%º,ì, æ, x, Èè¶CTLINK32 ,íC, Ü, ,fRf"fpfCf%º,ì ..\LIB  
fffBfCefNfgfŠ, ÅCŽŸ, É C:\WINAPPS\LIB ,Åf%ofCfuf  
%ofŠ, ð'T, μC¶¶-, , éŽÅsCE`Ž@ftj@fCf<, ÉffofbfO¶î•ñ, ðŽæ, èž, ñ, ÅCÚ×fzfOf"fgf}fbfv  
, ð¶¶-, μCWindows ŽÅsCE`Ž@ftj@fCf<¶i.DLL ,Å, Í, È, .EXE¶j, ð¶¶-, μ, Ü, .B

```
;Sample TLINK32.CFG file
/Lc:\BCB\LIB;c:\WINAPPS\LIB
/v /s
/Tpe
```

'^Ó: ŠÂ<<Y'èftj@fCf<,ÉfRf}f"fhf%ofCf"flvfVf+f" ,ð'Ç%ºÁ, μ, ÄŽw'è, , , é, ÆC'Ç  
%ºÁ, μ, ½fRf}f"fhf%ofCf"flvfVf+f" ,ªÖ"È, , , éŠÂ<<Y'èlfvfVf+f" , ðf¶fo¶f  
%ofCfh, μ, Ü, .B



## BCC32.EXE , ©, ç, ì TLINK32 , ìŽg—p

.OBJ ,Æ .LIB ,ìŠg'£Žq,đ•t, ,ÄfRf}f“fhf%oCf“, ©,çftf@fCf<-¼,đ“ü—Í,·,é,Æ□CfRf}f“fhf  
%oCf“fRf“fpfCf%o□iBCC32.EXE□j,đ'É,μ,Ä TLINK ,ÉfIfvJvf†f“,Æftf@fCf<-  
¼,đ“n,¹,Û,·□B,½,Æ,ì,î□CŽŸ,ì,æ,æ,ÉŽw'è,μ,Û,·□B

BCC32 mainfile.obj subl.obj mylib.lib

,±,ì□ê□#□CMAINFILE.OBJ□CSUB1.OBJ□CMYLIB.LIB ,æfŠf“fN,³,ê,ÄŽÀ□sÆ`Ž®ftf@fCf<  
MAINFILE.EXE ,æ□i□—,³,ê,Û,·□B

'□^Ó: ffftfHf<fg,Å,í□CBCC32 ,í C0W32.OBJ□CCW32.LIB□C,“ ,æ,Ñ IMPORT32.LIB□i,» ,é,¼,ê□  
%oŠú%o»f,fWf...□[f<□Cf%o“f^fCf€f%oCfuf%o“Š□C,“ ,æ,Ñ Windows fCf“f□[fgf%oCfuf  
%o“Š□j,đŽg,Á,Ä TLINK32 ,đÆÄ,Ñ□o,μ,Û,·□B,Û,½□C•K, ,fŠf“fj,É  
/c□i'â•¶Žš,Æ□—•¶Žš,đ<æ•É,·,éfŠf“fN□jIfvJvf†f“,đ“n,μ,Û,·□B

## f,fWf...[f'è`ftf@fCf<

=á

f,fWf...[f'è`ftf@fCf<,íCWindows fAfvfŠfP[fVf#f",ì"à—e,ÆfVfXfef€—v<□,ÉŠÖ,·,éî•ñ,đ  
TLINK32 , ,æ,Ñ ILINK32 ,É—^,!,éfefLfXfgftf@fCf<,Å,·□BIMPDEF ,đŽg,æ,Æf,fWf...  
□[f'è`ftf@fCf<,đ□í—,Å,«□CIMPLIB ,đŽg,æ,Æf,fWf...□[f'è`ftf@fCf<,©,çfCf"f□[fgf%ofCfuf  
%ofŠ,đ□í—,Å,«,Ü,·□B

C++Builder ,Å,í□C.DEF ftf@fCf<,đŽg—p,·,é,½,β,lfVfVf#f",lfvf□fWfFfNfg,ì .MAK  
ftf@fCf<,ÉŽw'è,μ,Ü,·□B

f,fWf...[f'è`ftf@fCf<Žg,ç□C.EXE ftf@fCf<,Ü,½,í .DLL ftf@fCf<,ì-  
¼'O,đŽw'è,·,é□CfAfvfŠfP[fVf#f"f^fCfv,đŽ`•É,·,é□CfCf"f□[fg,·,éŠÖ□",ÆfGfNfXfj  
□[fg,·,éŠÖ□",lfŠfXfg,đŽw'è,·,é□CfR□[fhfZfOf□"fg,Æff□[f^fZfOf□"fg,ì'®□«,đ<L□q,μ□C'Ç  
%oÅ,lfR□[fhfZfOf□"fg,Æff□[f^fZfOf□"fg,ì'®□«,đ<L□q,Å,«,é,æ,æ  
,É,·,é□CfXf^fbfN,lfTfCfY,đŽw'è,·,é□CfXf^fufvf□fOf%of€,ìŽæ,è□ž,Ý,đ%oÅ"\,É,·,é,Æ,ç,Á,½,±  
,Æ,đ□s,ç,Ü,·□B

,±,lf,fWf...[f'è`ftf@fCf<,ì'Á'è,ì—v'f,É,í^È%o°,ì,à,ì,ª ,è,Ü,·□B

- CODE •¶
- DATA •¶
- DESCRIPTION •¶
- EXETYPE •¶
- EXPORTS •¶
- HEAPSIZE •¶
- IMPORTS •¶
- LIBRARY •¶
- NAME •¶
- SECTIONS •¶
- SEGMENTS •¶
- STACKSIZE •¶
- STUB •¶
- SUBSYSTEM •¶

## f,fWf...[f'è`ftf@fCf<,đÉ—ª,μ,½□é#

f,fWf...[f'è`ftf@fCf<,đÉ—ª,·,é,Æ□C^È%o°,đŽw'è,μ,½,à,ì,Æ,Ý,È,³,è,Ü,·□B

|           |                              |                            |
|-----------|------------------------------|----------------------------|
| CODE      | PRELOAD MOVEABLE DISCARDABLE |                            |
| DATA      | PRELOAD MOVEABLE MULTIPLE    | ; □ifAfvfŠfP[fVf#f",ì□é#□] |
|           | PRELOAD MOVEABLE SINGLE      | ; □iDLL ,ì□é#□]            |
| HEAPSIZE  | 4096                         |                            |
| STACKSIZE | 1048576                      |                            |

fAfvfŠfP[fVf#f",ì'®□«,đfftfHf<fg^ÈŠÖ,É•ï□X,μ,½,ç□é#□,lf,fWf...[f'è`ftf@fCf<,đ□í—,·,é•K  
—v,ª ,è,Ü,·□B

EXETYPE •¶,đ□í□æ,μ,½□é#□□CC++Builder fŠf"fj,í IDE ,Å,ì□Ý'è,Ü,½,lfRf}f"fhf  
%ofCf",Å,lfVfVf#f",©,ç□C□í—,·,éŽÀ□sCE`Ž®ftf@fCf<,ìŽí—p,đCE^'è,Å,«,Ü,·□B

fCf"f□[fgf%ofCfuf%ofŠ,đŽæ,è□ž,p,Æ□Cf,fWf...[f'è`ftf@fCf<,ì IMPORTS  
fZfNfVf#f",ì,©,í,è,É,Å,«,Ü,·□B

C ,Æ C++ ,lf□[fXfR□[fh,ÅfGfNfXfj□[fgŠÖ□",đ'è< ,·,é,Æ,«,É \_export fL□[f□□[fh,đŽg,æ  
,Æ□CEXPORTS fZfNfVf#f",ª•s—v,É,È,è,Ü,·□B,½,¾,μ□C\_export ,ÅfGfNfXfj  
□[fg,μ,½ŠÖ□",ì□C□#□~□",Å,í,È,-¼'O,ÅfGfNfXfj□[fg,³,è,é,±,Æ,É'□^Ó,μ,Å,-  
¾,³,ç□í'É□í,ì□#□~□",ì•ù,ªCEø—|"ì□□B



## CODE •¶ [if,fWf...[f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

CODE ,ÍfR¶[fhfZfOf¶f“fg,ÍffftfHf<fg’@¶«,ð’è<` ,µ,Ü,·¶BfR¶[fhfZfOf¶f“fg-¼,Í”C^Ó,Å,·,¶CCODE ,Å¶I,í,é-¼’O¶iCODE ,Ü,½,Í MYCODE ,Ì,æ,π,È¶j,ðŽ¶,ÅfZfOf¶f“fgfNf%ofX,É’@ ,µ,Å,ç,é,± ,Æ,¶ðCE¶,Å,·¶B32 frfbfg,Ì¶\•¶,Í^È%o,Ì,Æ,¨,è,Å,·¶B

CODE [PRELOAD | LOADONCALL]

[EXECUTEONLY | EXECUTEREAD]

- PRELOAD ,ÍCEÅ,Ñ¶o,µfvf¶fOf%of€,¶f¶[fh,³,è,é,Æ,«,ÉfR¶[fh,¶f¶[fh,³,è,é,±,Æ,ðŽ|,·
- LOADONCALL¶iffftfHf<fg¶j,Ífvf¶fOf%of€,¶CEÅ,Ñ¶o,³,è,é,Æ,«,ÉfR¶[fh,¶f¶[fh,³,è,é,±,Æ,ðŽ|,·
- EXECUTEONLY ,ÍfR¶[fhfZfOf¶f“fg,ÌŽÀ¶s,Ì,Ý¶s,|,é,±,Æ,ðŽ|,·
- EXECUTEREAD¶iffftfHf<fg¶j,ÍfR¶[fhfZfOf¶f“fg,Í”C,Ý¶ž,Ý,ÆŽÀ¶s,ð¶s,|,é,±,Æ,ðŽ|,·
- FIXED¶iffftfHf<fg¶j,ÍfZfOf¶f“fg,¶CEÅ’è,³,è,½f¶f,ÍŠ,Ì^È’u,É, ,é,±,Æ,ðŽ|,·
- MOVEABLE ,ÍfZfOf¶f“fg,¶^Ú”@,Å,«,é,±,Æ,ðŽ|,·
- DISCARDABLE ,Í¶C•K—v,¶,È,,È,Å,½¶ê¶‡,ÉfZfOf¶f“fg,ð”jŠü,Å,«,é,±,Æ,ðŽ|,·¶iMOVEABLE ,Í^Ó-; ,ðŠÜ,¶¶j
- NONDISCARDABLE¶iffftfHf<fg¶j,ÍfZfOf¶f“fg,¶”jŠü,Å,«,,È,ç,±,Æ,ðŽ|,·

# DATA • ¶if,fWf...[f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

DATA ,Íff¶[f^fZfOf¶f“fg,ÍffftfHf<fg‘@¶<„ð'è<`„µ,Ü,·¶B¶\•¶,Í^È%º,ì,Æ,“„è,Å,·¶B

DATA [NONE | SINGLE | MULTIPLE]  
[READONLY | READWRITE]  
[PRELOAD | LOADONCALL]  
[SHARED | NONSHARED]

- NONE ,Íff¶[f^fZfOf¶f“fg,ð¶ì¶¬,µ,È,ç,±,Æ,ðŽ!,·¶B,±,ìfìfvfVf¶f“,í .DLL ,ÉÇÈÀ,é
- SINGLE¶i.DLL ftf@fCf<,ìffftfHf<fg¶j,Í 1 ,Ä,ìff¶[f^fZfOf¶f“fg,ª¶ì¶¬,³,è,Ä,·,×,Ä,ìfvf¶fZfX,É<ª—L,³,è,é,±,Æ,ðŽ!,·
- MULTIPLE¶i.EXE ftf@fCf<,ìffftfHf<fg¶j,ìff¶[f^fZfOf¶f“fg,ª,»„è,¼,è,ìfvf¶fZfX,É‘î,µ,Ä¶ì¶¬,³,è,é,±,Æ,ðŽ!,·
- READONLY ,Íff¶[f^fZfOf¶f“fg,ì“Ç,Ý¶ž,Ý,ì,Ý,ð¶s,ì,é,±,Æ,ðŽ!,·
- READWRITE¶ìffftfHf<fg¶j,ìff¶[f^fZfOf¶f“fg,ì“Ç,Ý¶ž,Ý,Æ¶‘,«¶ž,Ý,ð¶s,ì,é,±,Æ,ðŽ!,·
- PRELOAD ,ìff¶[f^fZfOf¶f“fg,ðŽg,¶f,fWf...¶[f<,ª¶Å¶%º,Éf¶¶[fh,³,è,é,Æ,«„Éf¶¶[fh,³,è,é,±,Æ,ðŽ!,·
- LOADONCALL¶ìffftfHf<fg¶j,ìff¶[f^fZfOf¶f“fg,ª¶Å¶%º,ÉfA¶N¶fZfX,³,è,é,Æ,«„Éf¶¶[fh,³,è,é,±,Æ,ðŽ!,·¶i32 frfbfgfAfvfŠfP¶[fvf¶f“,Ä,í-³Ž<¶j
- SHARED¶i16 frfbfg .DLL ftf@fCf<,ìffftfHf<fg¶j,Í 1 ,Ä,ìff¶[f^fZfOf¶f“fg,ìRfs¶[ª,·,×,Ä,ìfvf¶fZfX,É<ª—L,³,è,é,±,Æ,ðŽ!,·
- NONSHARED¶ìfvf¶fOf%ºf€„Æ 32 frfbfg .DLL ,ìffftfHf<fg¶j,ìCff¶[f^fZfOf¶f“fg,ìRfs¶[ª,±,ìff¶[f^fZfOf¶f“fg,ðŽg,ª•K—v,ì, ,éfvf¶fZfX,²,Æ,Éf¶¶[fh,³,è,é,±,Æ,ð^Ó-ì,·,é

## DESCRIPTION • ¶if,fWf...[f<'è`ftf@fCf<¶j

ŠÖ~A¶€-Ú

DESCRIPTION ¶ifvfVf¶f“¶j,ÍfAfvfŠfP¶[fvf¶f“f,fWf...[f<,É•¶Žš—ñ,ð’}“ü,µ¶C’Ê¶í,Ífvf¶fOf%of€  
,ì¶žÖ-¼¶C“ú•t¶C~¶ìCE ,É,Ç,ì¶î•ñ,ð<L¶q,·,é,ì,ÉŽg,ç,Ü,·¶B¶\•¶,ÍŽŸ,ì,Æ,¨,è,Å,·¶B

DESCRIPTION 'Text'

Text ,í ASCII •¶Žš—ñ,Å, ,è¶C’P^ø—p•,,Å^í,Ý,Ü,·¶B



## EXETYPE • ¶if,fWf...[f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

EXETYPE ,íffftfHf<fg,ìŽÀ¶sCE`Ž@ftf@fCf<¶i.EXE¶j,ìfwfbf\_¶[f^fCfv¶i16  
frfbfgfAfvfŠfp¶[fvf¶f“—p¶j,đ'è<` ,μ,Û,·¶B%°^ÊCEYS·¶«,ì,½,ß 32 frfbfgfAfvfŠfp¶[fvf¶f“ ,Å,í,±  
,ìZfNfvf¶f“ ,đ,» ,ì,Û,ÛŽg,ì,Û,·¶B,½,¾,μ EXETYPE ,đ•í¶X,·,é•K—v,<sup>a</sup> ,é¶ê¶¶,É,í¶CNAME  
•¶,đŽQ¶Æ,μ,Ä,,¾,¾,¶BEXETYPE ,ì¶\•¶,íŽŸ,ì,Æ,“,è,Ä,·¶B

EXETYPE [WINDOWS]

## EXPORTS • ¶ [if,fWf... [f<'è<` ftf@fCf<¶j

ŠÖ~A¶€-Ú

EXPORTS ,ÍfGfNfXf|[fg,·,éŠÖ",ì-¼'O,Æ'®¶«,ð'è<` ,μ,Û,·¶BEXPORTS  
fL|[f|[fh,Á'è<` ,ìŽn,Û,è,ðŽ|,μ,Û,·¶B,±,ìĀě,è,É,Í•K—v,É,¾,`fGfNfXf|  
|[fg'è<` ,ðŽw'è,Á,«¶C'è<` ,í,»,è,¼,ê•É,ì¶s,ÉŽw'è,μ,Û,·¶B\•¶,ÍŽŸ,ì,Æ,¨,è,Á,·¶B

EXPORTS

ExportName [Ordinal]  
[RESIDENTNAME] [Parameter]

- ExportName ,ÍfGfNfXf|[fg,·,éfvf"ff{f<,ð'è<` ,·,é ASCII •¶Žš—ñ,Á¶C¶Ž®,ÍŽŸ,ì,æ,μ,É,È,é  
EntryName [=InternalName]  
InternalName ,í,±,ìfGf"fgfŠ,ðŽQ¶Æ,·,é,½,β,ÉfAfvfŠfP|[fvf¶f"à,ÁŽg,μ-¼'O  
EntryName ,ÍŽÀ¶sĀ`Ž®ftf@fCf<,ÍfGf"fgfŠfe|[fuf<,É—ñ<" ,¾,è,é-  
¼'O,Á, ,è¶ĀŠO•",©,çŽQ¶Æ,Á,«,é  
Ordinal ,ÍŠÖ",ì¶#~",ð'è<` ,μ¶C¶Ž®,ÍŽŸ,ì,æ,μ,É,È,é  
@ordinal  
,±,±,Á,ì ordinal ,í¶#~",ðŽw'è,·,é¶@~"l  
fAfvfŠfP|[fvf¶f"ff,fWf... [f<,â DLL f,fWf... [f<,ª DLL ,©,çfGfNfXf|  
|[fg,¾,è,½ŠÖ",ðĀĀ,Ń¶o,·ê¶#¶ĀĀ,Ń¶o,μ'μ,Íf,fWf... [f<,ÍŠÖ",ð-  
¼'O,Û,½,ì¶#~",ÁŽQ¶Æ,Á,«,é¶B¶#~",ÁŠÖ",ðŽQ¶Æ,·,é,Æ¶ĀŠÖ",ð"Á'è,·,é,Æ,«,É•¶Žš—  
ñ,ì"äŠr,ªs—v,Á, ,é,½,β,É¶,·,É,È,é¶BŽg—p,·,éfvf,fŠ,ð¶,É,·,é,É,ì¶C¶iŠÖ",ì DLL  
,ìŠ" ,©,ç¶jŠÖ",ð¶#~",ÁfGfNfXf|[fg,μ¶C¶iĀĀ,Ń¶o,μ'μ,Íf,fWf... [f<,ìŠ" ,©,ç¶j¶#~",ÁfCf"¶f|  
|[fg,Û,½,ìĀĀ,Ń¶o,μ,ð¶s,μ  
ŠÖ",ð¶#~",ÁfGfNfXf|[fg,·,é,Æ¶C¶i" ,μ,Á,ç,È,ç-¼'Ofe|[fuf<,É'u,©,è,é¶BŠÖ",ð-  
¼'O,ÁfGfNfXf|[fg,·,é,Æ¶C-¼'O,ì¶i" ,ì-¼'Ofe|[fuf<,É'u,©,è,é¶Bf,fWf... [f<,ì¶i" -  
¼'Ofe|[fuf<,ì¶Cf,fWf... [f<,ªf|[fh,¾,è,Á,ç,éŠÖ,ì¶í,Éfvf,fŠ,É'¶¶Y,·,é,ª¶C¶i" ,μ,Á,ç,È,ç-  
¼'Ofe|[fuf<,ì¶í,É'¶¶Y,·,é,í,·,Á,í,È,ç  
RESIDENTNAME ,ÍŠÖ",ì-¼'O,ð¶í,É¶i" ,¾,¹,é,½,β,ìŽw'è,Á,·¶B,±,è,ì¶#~",ÁfGfNfXf|  
|[fg,·,éê¶#,É,ì,Ÿ—LĀø¶iff¶fHf<fg,Á,í-¼'O,ì¶i" ,μ,È,ç¶j  
Parameter ,Ífvf¶f¶f" ,ì¶@~"l,Á, ,è¶ĀŠÖ",É^ø¶,Æ,μ,Á"n,·f|[fh",ðŽw'è

# HEAPSIZE • ¶if,fWf...¶[f'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

HEAPSIZE ,í¶CfAvfšfP¶[fVf#f“,lf¶¶[fjf<fq¶[fv,É•K—  
v,ÉfofCf¶g“,đ'è<`,µ,Ü,·¶Bf¶¶[fjf<f¶f,fš,đš,,,è“—  
,Ä,é,Æ,«¶CfAvfšfP¶[fVf#f“,í•K, ,f¶¶[fjf<fq¶[fv,đžg,č,Ü,·¶B

HEAPSIZE ,ì 32 frfbfg,ì¶\•¶,ížÿ,ì,Æ,“,è,Ä,·¶B

HEAPSIZE Reserve[, Commit]

- Reserve ,í 10 ¶i¶“¶l,Ü,½,í 16 ¶i¶“¶l,Äžw'è,µ¶CfftfHf<fg,í 1MB ¶B%º^Ê¶i16  
frfbfg¶jÆÝš·¶«,đ•â,¶,½,ß,É¶C.DEF ftf@fCf<,Äšm•Ü,µ,½'l,ª 64KB  
,æ,è¶-³,č¶ê¶#¶Cfšf“¶j,lf¶¶[fjf<fg'l,ì 1MB ,đžg,¶
- Commit ,í 10 ¶i¶“¶l,Ü,½,í 16 ¶i¶“¶l,Äžw'è,·é¶BfRf~fbfgfTfCfY,í¶È—ª%Å“\  
,Ä¶Cžw'è,³,è,È,č¶ê¶#,lf¶¶[fjf<fg,ì 4KB ,ªžg,í,è,é¶Bžw'è,Ä,«,é¶Ä¶-fRf~fbfgfTfCfY,í  
0¶B,Ü,½¶CfRf~fbfgfTfCfY,ížw'è'l,Ü,½,lf¶¶[fjf<fg'l,í•K, ,šm•ÚfTfCfY,æ,è,à¶-³,č,©,Ü,½,í“™,µ,-  
,È,~,è,í,È,ç,È,č

šm•Ü,µ,½f¶f,fš,í¶C•“—¶f¶f,fš,Ü,½,ífy¶[fWf“fOfTf@fCf<,ì,č,.,è,©,Éš,,,è“- ,Ä,ç,è,é¶Á'áf¶f,fš—  
É,đ•\,µ,Ü,·¶B,Ä,Ü,è¶Cšm•Ü,µ,½f¶f,fš,í¶Á'á%Å“\  
fq¶[fvfTfCfY,đ'è<`,µ,Ü,·¶BfífyfÆ¶[fefBf“fOfVfXfef€,í¶Cžw'èf¶f,fš—É,ªšm•Ü,³,è¶C•K—  
v,È¶ê¶#,íš,,,è“- ,Ä,ç,è,é,±,Æ,đ•Ü¶Ø,µ,Ü,·¶B

fRf~fbfg,µ,½f¶f,fš,ì^Ó-; ,ífífyfÆ¶[fefBf“fOfVfXfef€,É,æ,Ä,Ä^Ü,È,è,Ü,·¶BWindows NT  
,Ä,í¶CfRf~fbfg,µ,½f¶f,fš,ífAvfšfP¶[fVf#f“,lf¶¶[fh,â¶%šú%»žž,Éfq¶[fv,É'í,µ,Äš,,,è“-  
,Ä,ç,è,é•“—¶f¶f,fš—É,đ•\,µ,Ü,·¶BfRf~fbfg,µ,½f¶f,fš,í¶C•“—  
¶f¶f,fš,Ü,½,ífy¶[fWf“fOfTf@fCf<,ÉfXfy¶[fX,đš,,,è“-  
,Ä,Ü,·¶B¶, ,čfRf~fbfg'l,í¶CfAvfšfP¶[fVf#f“,ªfq¶[fvfXfy¶[fX,đ,æ,è'½,•K—  
v,Æ,·,é,Æ,«,ÉžžšÖ,đ¶ß-ň,µ,Ü,·,ª¶Cf¶f,fš•K—v—É,Æ<N“® ,É—v,·,éžžšÖ,ª'¶%Å,µ,Ü,·¶B

/H ,Ü,½,í /Hc fRf}f“fhf%ofCf“flfvfVf#f“,đžg,Ä,Ä¶C.DEF  
ftf@fCf<,Äžw'è,µ,½fq¶[fvšm•ÚfTfCfY,ÆfRf~fbfgfTfCfY,đfí¶[fo¶[f%ofCfh,Ä,«,Ü,·¶B/H ,đžg,¶  
,Æ¶C.DEF ftf@fCf<,Äžw'è,Ä,«,é¶Ä¶-l 64KB ,æ,è¶-³,čfq¶[fvšm•ÚfTfCfY,đžw'è,Ä,«,Ü,·¶B

# IMPORTS • ¶ [if,fWf... [f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

IMPORTS ,Í DLL , ©,çfCf“f|[fg,·,éŠÖ” ,ì-¼‘O,Æ’@¶«,ð‘è<` ,µ,Û,·¶BIMPORTS •¶,ÅfCf“f|[fg,·,é DLL ŠÖ” ,lfSfXfg,ðŽw’è,·,é, ©,í,è,É^È%º,ì 2 ‘È,è,ì•û-@,ª, ,è,Û,·¶B

- TLINK32 fRf}f“fhf%ofCf“ ,Å DLL ,lfCf“f|[fgf%ofCfuf%ofŠ,ðŽw’è,·,é
- IDE ,lfvf¶fWfFfNfgf}f|[fWff,Å DLL ,lfCf“f|[fgf%ofCfuf%ofŠ,ðŽæ,è¶ž,¶

ŠÖ”¶CfNf%ofX¶C,Û,½,Íff¶f^ ,ðfCf“f|[fg,·,é,É,í \_\_import ,ðŽg,í,È,·,è,í,È,è,Û,¹,ñ¶B

IMPORTS fL¶[f¶[fh,Å‘è<` ,ìŽn,Û,è,ðŽì,µ,Û,·¶B,±,ìÆã,è,É,í•K—v,È,¾,·fCf“f|[fg‘è<` ,ðŽw’è,Å,«¶C‘è<` ,í,»,è,¼,è•É,ì¶s,ÉŽw’è,µ,Û,·¶B¶¶•¶,íŽŸ,ì,Æ,“ ,è,Å,·¶B

IMPORTS

[InternalName=]ModuleName.Entry

- InternalName ,í ASCII •¶Žš—  
ñ,Å ,è¶CŠÖ” ,ðÆÄ,Ñ¶o,·,½,ß,ÉfAfvfŠfP¶[fvf¶f“ ,ÅŽg,çftfj¶[fN,È-¼‘O,ðŽw’è
- ModuleName ,í 1 •¶Žš^É¶ã,í‘ã•¶Žš,í ASCII •¶Žš,Å ,è¶CŠÖ” ,ðŠÛ,þŽÀ¶sÆ`Ž®f,fWf...  
¶[f<,ì-¼‘O,ð‘è<` ¶Bf,fWf...¶[f<-¼,íŽÀ¶sÆ`Ž®ftf@fCf<,ì-¼‘O,Æ^è‘v,³,¹,é¶B,½,Æ,í,í¶Cftf@fCf<  
SAMPLE.DLL ,lf,fWf...¶[f<-¼,í SAMPLE
- Entry ,lfCf“f|[fg,·,éŠÖ” ,ðŽw’è,µ,Û,·¶B,±,è,íŠÖ” ,ì-¼‘O,ðŽw’è,·,é ASCII •¶Žš—  
ñ,Û,½,íŠÖ” ,ì¶¶~” ,ðŽì,·¶@”

# LIBRARY •¶ [if,fWf...[f<'è`ftf@fCf<]

SÖ~A¶€-Ú

LIBRARY ,Í DLL f,fWf...[f<,ì-¼'O,ð'è<` ,μ,Û,·¶Bf,fWf...[f<'è<`ftf@fCf<,É,Í¶C.DLL ,ðŽw'è,·,é  
LIBRARY •¶,©.EXE,ðŽw'è,·,é NAME •¶,ðŽw'è,Å,«,Û,·¶B

f%ofCfuf%ofŠ,ìf,fWf...[f<-¼,ÍŽÀ¶s€`Ž@ftf@fCf<,ì-¼'O,Æ^è'v,<sup>3</sup>,<sup>1</sup>,Ä,<sup>3</sup>/<sub>4</sub>,<sup>3</sup>,ç¶B,½,Æ,ì,Î¶Cf  
%ofCfuf%ofŠ MYLIB.DLL ,ìf,fWf...[f<-¼,Í MYLIB ,Å,·¶B\•¶,ÍŽŸ,ì,Æ,·,è,Å,·¶B

LIBRARY LibraryName [INITGLOBAL | INITINSTANCE]

- LibraryName [if|fvfvtj" ]j,Í ASCII •¶Žš—ñ,Å¶Cf%ofCfuf%ofŠf,fWf...[f<,ì-¼'O,ð'è<` ,·,é¶BLibraryName ,ð¶È—<sup>a</sup> ,·,é,Æ¶CŠg'£Žq,ðŽæ,è¶œ,ç,½ftf@fCf<-¼,ðŽw'è,μ,½,à,ì,Æ,Ý,È,<sup>3</sup>,é,é¶Bf,fWf...[f<'è<`ftf@fCf<,Å NAME •¶,à LIBRARY •¶,à¶È—<sup>a</sup> ,·,é,Æ¶CModuleName ^ø" ,<sup>a</sup>,È,ç NAME •¶,ðŽw'è,μ,½,à,ì,Æ,Ý,È,<sup>3</sup>,é,é
- INITGLOBAL ,Í¶Cf%ofCfuf%ofŠf,fWf...[f<,æ¶f,fŠ,É¶Å¶%o,Éf¶¶[fh,<sup>3</sup>,é,é,Æ,«,ì,Ýf%ofCfuf%ofŠ¶%oŠú%o»f<¶[f`f" ,<sup>a</sup>€Ä,Ñ¶o,<sup>3</sup>,é,é,±,Æ,ðŽì,·
- INITINSTANCE ,Í¶C¶V,μ,çfvf¶fZfX,<sup>a</sup>f%ofCfuf%ofŠ,ðŽg,α,½,Ñ,Éf%ofCfuf%ofŠ¶%oŠú%o»f<¶[f`f" ,<sup>a</sup>€Ä,Ñ¶o,<sup>3</sup>,é,é,±,Æ,ðŽì,·

# NAME • ¶ [if,fwf... [f'è`ftf@fCf< [j

ŠÖ~A [€-Ú

NAME ,ífAfvfšfP [fvf#f“ ,ìŽÀ [sCE`Ž @f,fwf... [f<,ì-¼'O,Ā,· [BŠÖ [“ ,ìfGfNfXf [ [fg,ì,Æ,« ,Éf,fwf... [f<-¼,Āf,fwf... [f<,đŽ`·É,Ā,« ,é,æ,π,É,È,è,Û,· [B

NAME ModuleName [WINDOWSAPI] | [WINDOWCOMPAT]

- ModuleName [iflvfVf#f“ [j,í 1 • ¶ Žš`É [ã,ì`å • ¶ Žš,ì ASCII • ¶ Žš— ñ,Ā, ,è [CŽÀ [sCE`Ž @f,fwf... [f<,ì-¼'O,đŽw'è,μ,Û,· [B,±,ì-¼'O,ìŽÀ [sCE`Ž @ftf@fCf<,ì-¼'O,Æ^è'v,³,¹,Ā,,¾,³,¢ [B,½,Æ,ì,ì [CŽÀ [sCE`Ž @ftf@fCf< SAMPLE.EXE ,đŽ [ ,ĀfAfvfšfP [fvf#f“ ,ìf,fwf... [f<-¼,ì SAMPLE ,Ā,· [B  
ModuleName ,đ [È—<sup>a</sup>,· ,é,Æ [CŽÀ [sCE`Ž @ftf@fCf<,ìftf@fCf<-¼,Æ^è'v,· ,éf,fwf... [f<-¼,đŽw'è,μ,½,à,ì,Æ,Ý,È,³,è,Û,· [B,½,Æ,ì,ì [Cf,fwf... [f<-¼,ìŽw'è,đ [È—<sup>a</sup>,μ [CŽÀ [sCE`Ž @ftf@fCf<,ì-¼'O,<sup>a</sup> MYAPP.EXE ,Ā, ,é [é [ [Cf,fwf... [f<-¼ MYAPP ,đŽw'è,μ,½,à,ì,Æ,Ý,È,³,è,Û,· [B  
f,fwf... [f<'è`ftf@fCf<,Ā NAME • ¶ ,à LIBRARY • ¶ ,à [È—<sup>a</sup>,· ,é,Æ [CModuleName ^ø [“ ,<sup>a</sup>,È,¢ NAME • ¶ ,đŽw'è,μ,½,à,ì,Æ,Ý,È,³,è,Û,· [B  
NAME • ¶ ,Æ LIBRARY • ¶ ,íf,fwf... [f<'è`ftf@fCf<,ì,» ,ì'¼,ì,Ç,ì,æ,π ,È • ¶ ,æ,è,à [æ,É<L [q,μ,È,¯ ,é,ì,È,è,Û,<sup>1</sup>,ñ [B
- WINDOWSAPI ,ì Windows ŽÀ [sCE`Ž @ftf@fCf<,đŽ!,μ [CTLINK32 ,ìfifvfVf#f“ /aa ,Æ““™ ,ì<@“\,<sup>a</sup> , ,é
- WINDOWCOMPAT ,ì Windows CEÝŠ·fLfff %ofNf^ [ [f, [fh,ìŽÀ [sCE`Ž @ftf@fCf<,đŽ!,μ [CTLINK32 ,ìfifvfVf#f“ /ap ,Æ““™ ,ì<@“\,<sup>a</sup> , ,é

## SECTIONS • ¶if,fWf...[f'è`ftf@fCf<¶j

ŠÖ~A¶€-Ú

SECTIONS • ¶,đŽg,α,Æ¶CŽÀ¶sfCf¶¶[fW,ì 1 ,Â,Û,½,Í•;¶”,ìfZfNfVf¶¶”,Á’@¶¶«,đ¶Ý’è,Á,«,Û,·¶B,±,ì•¶,đŽg,α,Æ¶C^Û,È,éSefZfNfVf¶¶”,ìffftfHf<fg,ì’@¶¶«,đf¶¶fo¶¶f%ofCfh,Á,«,Û,·¶BSECTIONS ,ì¶•¶,ÍŽÝ,ì,Æ,“,è,Á,·¶B

SECTIONS

<section\_name> (CLASS 'classname'] attributes

- SECTIONS ,ìfZfNfVf¶¶”,ì’è`fŠfXfg,ìŽn,Û,è,đŽ!,·
- SECTIONS fL¶[f¶¶[fh,ìÆä¶CŠefZfNfVf¶¶”,ì’è` ,í•Ê¶X,ì¶s,ÁŽw’è,μ,È,¯,é,î,È,ç,È,ç¶B,½,¾,μ¶CSECTIONS fL¶[f¶¶[fh,ì¶Á¶%o,ì’è` ,Æ““,¶¶s,Û,½,ì¶æ¶s,·,é¶s,ì,Ç,¿,ç,É, ,Á,Ä,à,©,Û,í,È,ç¶B,Û,½¶C.DEF ftf@fCf<,É,Í 1 ,Á,Û,½,Í•;¶”,ì SECTIONS • ¶,đŽw’è,Á,«,é¶BSEGMENTS fL¶[f¶¶[fh,ì SECTIONS ,Æ““<“,Áftf¶[fg,³,é,Ä,ç,é¶BŠefZfNfVf¶¶”,ìfŠfXfg,ì¶•¶,ÍŽÝ,ì,Æ,“,è

,±,ì¶•¶,Á¶Csection\_name ,ì’á•¶Žš,Æ¶→•¶Žš,đ<æ•Ê,μ,Û,·¶BCLASS fL¶[f¶¶[fh,ìÆÝŠ·¶¶,ì,½,ß,Éftf¶[fg,³,é,Ä,ç,Û,·,³¶C-³Ž<,³,é,Û,·¶B’@¶¶«,ì^ø¶”,É,Í EXECUTE¶CREAD¶CSHARED¶C,“,æ,Ñ WRITE ,ì,ç,·,é,© 1 ,Á,Û,½,Í•;¶”,đŽw’è,Á,«,Û,·¶B

## SEGMENTS • ¶if,fwf...[f<'è<`ftf@fCf<¶

ŠÖ~A¶€-Ú

SEGMENTS ,Í'Ç%oÁ,lfR¶[fhfZfOf¶"fg,Æff¶[f^fZfOf¶"fg,lfZfOf¶"fg'@¶<δ'è<` ,μ,Ü,·¶B¶  
•¶,Í^È%oº,ì,Æ,¨,è,Á,·¶B

SEGMENTS

SegmentName [CLASS 'ClassName']

[MinAlloc]

[SHARED | NONSHARED]

[PRELOAD | LOADONCALL]

[MIXED1632]

- SegmentName ,Í¶V<K,lfZfOf¶"fg,ì-¼'O,δŽw'è,·,é•¶Žš—ñ¶B•W¶€,lfZfOf¶"fg-¼ \_TEXT ,Æ \_DATA¶i,» ,é,¼,é•W¶€,lfR¶[fhfZfOf¶"fg,Æff¶[f^fZfOf¶"fg,δ•\,·¶j,δŠÜ,ñ,Á,ç,è,í,Ç,ì,æ,æ,È-¼'O,δŽw'è,μ,Ä,à,©,Ü,í,É,ç
- ClassName¶iflfvfVf¶"¶j,ÍŽw'è,μ,½fZfOf¶"fg,lfNf%oX-¼¶BfNf%oX-¼,δ¶È—  
a,·,é,Æ¶CfNf%oX-¼ CODE ,δŽw'è,μ,½,à,ì,Æ,Ý,É,³,é,é
- MinAlloc¶iflfvfVf¶"¶j,í@¶"¶l,Á, ,è¶CfZfOf¶"fg,ìÁ¶-Š,,è"-,ÄfTfCfY,δŽw'è,·,é¶BTLINK ,Æ TLINK32 ,í,±,ì'l,δ-³Ž<
- SHARED¶i16 frfbfg,ì .DLL ftf@fCf<,iffftfHf<fg¶j,í 1 ,Ä,iff¶[f^fZfOf¶"fg,lfRfs¶[ ,a,·, x ,Ä,lfvf¶fZfX,É<æ—L,³,è,é,±,Æ,δŽ!,·
- NONSHARED¶i.EXE ,Æ 32 frfbfg,ì .DLL ftf@fCf<,iffftfHf<fg¶j,í¶Cf¶[f^fZfOf¶"fg,lfRfs¶[ ,a,±,iff¶[f^fZfOf¶"fg,δŽg,æ•K—v,ì ,éfvf¶fZfX,², ,Æ,Éf¶¶[fh,³,è,é,±,Æ,δŽ!,·
- PRELOAD ,lfZfOf¶"fg,a,½,¾,¿,¿,Éf¶¶[fh,³,è,é,±,Æ,δŽ!,·¶B
- LOADONCALL ,lfZfOf¶"fg,a¶AfNfZfX,³,è,é,Æ,« ,Ü,½,íCEÄ,Ñ¶o,³,è,é,Æ,« ,Éf¶¶[fh,³,è,é,± ,Æ,δŽ!,μ,Ü,·¶iTLINK32 ,Ä,í-³Ž<¶¶BfŠ¶[fXfRf"¶fpfCf%o,í LOADONCALL flfvfVf¶" ,δf¶[fo¶[f %oCfh,μ¶C,© ,í,è,ÉfZfOf¶"fg,δ ,ç,© ,¶l,ßf¶¶[fh,·,é,±,Æ,à ,è,Ü,·¶B
- MIXED1632¶iflfvfVf¶"¶j,í 16 frfbfgfSf"¶j,ì,Y,ÄfTf¶[fg,³,é¶C32 frfbfgf,fWf...[f<,Æ 16 frfbfg Windows 95 fAfvfŠfP¶[fvf¶" ,δfŠf"¶fN,·,é¶BWindows 95 ,ì 16 frfbfg¶[f\_¶[ ,í¶CfAfvfŠfP¶[fvf¶" ,lfZfOf¶"fgfe¶[fuf<,Á 2000H ,a¶Y'è,³,è,Ä,ç,é¶ê¶,É 32 frfbfgfZfOf¶"fg,δfTf¶[fg,·,é



# STACKSIZE •¶ [if,fWf...][f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

STACKSIZE ,ÍfAfvfŠfP¶[fvf¶f" ,Íf¶¶[fjf<fXf^fbfN,É•K—  
v,ÉfofCf¶g" ,đ'è<` ,µ,Ü,·¶BfAfvfŠfP¶[fvf¶f" ,ÍŠÖ"CEÄ,Ň¶o,µ,đ¶s,¶  
,Æ,« ,É•K, ,f¶¶[fjf<fXf^fbfN,đŽg,¶,Ü,·¶B

STACKSIZE ,ì 32 frfbfg¶•¶,ÍŽŸ,ì,Æ,¨ ,è,Á,·¶B

STACKSIZE Reserve[ , Commit]

- Reserve ,í 10 ¶i¶"¶l,Ü,½,í 16 ¶i¶"¶l,Á ,è¶CfftfHf<fg,í 1MB¶B%o^É¶i16  
frfbfg¶jCEÝŠ·¶« ,đ•â,¶,½,ß¶C.DEF ftf@fCf<,Á 64KB  
,æ,è¶- ,³,¶Šm•Ú'l,đŽw'è,µ,Á ,é¶é¶¶,ÉfŠf"¶j,ÍffftfHf<fg,ì 1MB ,đŽg,¶
- Commit ,í 10 ¶i¶"¶l,Ü,½,í 16 ¶i¶"¶l,ÁŽw'è¶BfRf~fbfgfTfCfY,í¶È—³%oÁ"¶,Á¶CŽw'è,³,è,Á,¶  
,É,¶¶é¶¶,ÍffftfHf<fg,ì 8KB ,³Žg,í,è,é¶BŽw'è,Á,« ,é¶Á¶-fRf~fbfgfTfCfY,í  
4KB¶B,³,ç,É¶CŽw'èfRf~fbfgfTfCfY,Ü,½,ÍffftfHf<fgfRf~fbfgfTfCfY,ÍŠm•ÚfTfCfY,æ,è¶- ,³,¶  
,©"™ ,µ,,É,¨ ,é,ì,É,ç,É,¶

Šm•Ú,µ,½f¶f,fŠ,í¶C·" —¶f¶f,fŠ,Ü,½,Ífy¶[fWf"foftf@fCf<,ì,¶, ,è,© ,ÉŠ,,è"- ,Á,ç,è,é¶Á'âf¶f,fŠ—  
É,đ•\,µ,Ü,·¶B,Á,Ü,è¶CŠm•Ú,µ,½f¶f,fŠ,í¶Á'â%oÁ"¶\  
fXf^fbfNfTfCfY,đ'è<` ,µ,Ü,·¶BfÍfyfCE¶[fefBf"fofvfXfef€,í¶CŽw'èf¶f,fŠ—É,³Šm•Ú,³,è¶C•K—  
v,É¶é¶¶,ÍŠ,,è"- ,Á,ç,è,é,±,Æ,đ•Ú¶Ø,µ,Ü,·¶B

fRf~fbfg,µ,½f¶f,fŠ,ì^Ó-; ,ÍfÍfyfCE¶[fefBf"fofvfXfef€,É,æ,Á,Á^Ü,È,è,Ü,·¶BWindows NT  
,Á,í¶CfRf~fbfgf¶f,fŠ,ÍfAfvfŠfP¶[fvf¶f" ,Íf¶¶[fh,â<N" @ Žž,ÉfXf^fbfN,É'í,µ,ÁŠ,,è"- ,Á,ç,è,é•" —  
¶f¶f,fŠ—É,đ•\,µ,Ü,·¶BfRf~fbfg,µ,½f¶f,fŠ,í¶C·" —  
¶f¶f,fŠ,Ü,½,Ífy¶[fWf"foftf@fCf<,ÉfXfy¶[fX,đŠ,,è"-  
,Á,Ü,·¶B¶, ,¶fRf~fbfg'l,í¶CfAfvfŠfP¶[fvf¶f" ,³q¶[fvfXfy¶[fX,đ,æ,è'½,•K—  
v,Æ,· ,é,Æ,« ,ÉŽžŠÖ,đ¶ß-ñ,µ,Ü,· ,³¶C•K—vf¶f,fŠ—É,Æ<N" @ ,É—v,· ,éŽžŠÖ,³'¶%oÁ,µ,Ü,·¶B

/S ,Ü,½,í /Sc fRf}f"fh%ofCf"flfvfVf¶f" ,đŽg,Á,Á¶C.DEF  
ftf@fCf<,ÁŽw'è,µ,½fXf^fbfNŠm•ÚfTfCfY,ÆfRf~fbfgfTfCfY,đfí¶[fo¶[f%ofCfh,É,Á,« ,Ü,·¶B/S  
,đŽg,¶,Æ¶C.DEF ftf@fCf<,ÁŽw'è,Á,« ,é¶Á¶-l' 64KB  
,æ,è¶- ,³,¶fXf^fbfNŠm•ÚfTfCfY,đŽw'è,Á,« ,Ü,·¶B

.DLL ftf@fCf<,ÍfRf"fpfCf<Žž,É STACKSIZE •¶,ÍŽg,í,È,¶,Á,¾,¾,³,¶¶B

# STUB •¶ [if,fWf...][f<'è<`ftf@fCf<¶j

ŠÖ~A¶€-Ú

STUB ,Í FileName ,ÅŽw'è,μ,½ DOS ,ìŽÀ¶sCE`Ž®ftf@fCf<,ðf,fWf...[f<,ìŽn,β,É'Ç  
%oÁ,μ,Û,·BŽÀ¶sCE`Ž®fXf^fu,íCCEë,Á,½ŠÅ««,ÅŽÀ¶s,³,é,é,ÆCEx¶¶f¶bfZ¶[fW,ð·\Ž!,μ,Ä¶|—  
¹,μ,Û,·¶i,½,Æ,!,íC¶DOS ŠÅ««,Å Windows fAfvfŠfP¶[fVf¶f“ ,ðŽÀ¶s,μ,æ,α,Æ,·,éêê¶¶j¶B

C++Builder ,Å,íC¶STUB •¶,Å•Ê,ìfXf^fu,ðŽw'è,μ,È,çCEÀ,è Windows  
fAfvfŠfP¶[fVf¶f“,ìŽn,β,É'g,Ý¶ž,ÝfXf^fu,ð'Ç%oÁ,μ,Û,·BfŠf“fj,íŽ©“®“I,É WINSTUB.EXE  
,ðŽæ,è¶ž,β,ì,Å¶C,±,ì,½,β,É STUB •¶,ðŽg,α•K—v,í, ,è,Û,¹,ñ¶B

¶\•¶,íŽŸ,ì,Æ,“,è,Å,·¶B

STUB 'FileName'

- FileName ,íf,fWf...[f<,É'Ç%oÁ,³,é,é DOS ,ìŽÀ¶sCE`Ž®ftf@fCf<,ì-¼'0¶B,±,ì-¼'0,í DOS  
,ìftf@fCf<-¼'K'è,É¶],α¶BFileName  
,ÅŽw'è,μ,½ftf@fCf<,¶j¶fCEf“fgfffBfCEfNfgfŠ,É'¶¶Ý,μ,È,çêê¶¶CTLINK ,í PATH  
ŠÅ««•ì¶“,ÅŽw'è,μ,½fffBfCEfNfgfŠ,Åftf@fCf<,ð'T,·

# SUBSYSTEM •¶if,fWf...¶[f<'è`ftf@fCf<¶j

ŠÖ~A¶€-Ú

SUBSYSTEM ,Í ¶CfŠf“fN,³,ê,Ä,ç,éAfvfŠfP¶[fVf¶f“ ,ì Windows fTfufVfXfef€  
, ,æ,ÑfTfufVfXfef€fo¶[fWf¶f“”Ô¶t,ðŽw’è,µ,Û,·¶BSUBSYSTEM ,ì¶\•¶,ÍŽŸ,ì,Æ,“ ,è,Å,·¶B

SUBSYSTEM [subsystem, ]subsystemID

- ¶È—ª%oÂ“\,Éfpf%of¶¶[f^ ,ì subsystem ,í  
WINDOWS¶CWINDOWAPI¶CWINDOWCOMPAT¶C, ,æ,Ñ NOTWINDOWCOMPAT ,ì,ç  
, ,è,©,ðŽw’è¶Bsubsystem ,ðŽw’è,µ,È,ç¶é¶¶CfŠf“fj,ªfftfHf<fg,ì WINDOWS  
fTfufVfXfef€¶i3.1¶j,ðŽg,ª
- Ć`Ž® d.d¶id ,í 10 ¶i¶”¶j,ðŽg,Á,Ä subsystemID fpf%of¶¶[f^ ,ðŽw’è,·,é•K—  
v,ª, ,é¶B,½,Æ,ì,î¶CWindows fo¶[fWf¶f“ 4.0 ,ðŽw’è,·,é¶é¶¶C^È%oº,ì 2 ,Å,ì SUBSYSTEM •¶,ì,ç  
, ,è,©,ðŽg,ª

SUBSYSTEM 4.0

SUBSYSTEM WINDOWS, 4.0

.DEF ftf@fCf<,ÉŽw’è,µ,½ SUBSYSTEM •¶,ð-³Ĉø,É,·,é,É,Í¶C/a ,Æ /V fRf}f“fhf  
%ofCf“fifvfVf¶f“ ,ðŽg,ç,Û,·¶B

# f,fWf...[f<'è<`ftf@fCf<,i—á

ŠÖ~A□€-Ú

^È%º,Éf,fWf...[f<'è<`ftf@fCf<,iŽÀ—á,đŽ|,µ,Û,·□B

|             |                           |
|-------------|---------------------------|
| NAME        | WHELLO                    |
| DESCRIPTION | 'C++ Windows Hello World' |
| EXETYPE     | WINDOWS                   |
| CODE        | MOVEABLE                  |
| DATA        | MOVEABLE MULTIPLE         |
| HEAPSIZE    | 1024                      |
| STACKSIZE   | 5120                      |
| EXPORTS     | MainWindowProc            |

```

,±,İftf@fCf<,đ•¶,²,Æ,É•ª□í,µ,½,à,İ,đ^È%º,ÉŽ|,µ,Û,·□B
• NAME ,İfAfvfŠfP□[fVf#f“ ,i-¼‘O,đŽw’è, ,é□BfAfvfŠfP□[fVf#f“ ,Å,í,È, .DLL
ftf@fCf<,đ□□- , ,é□è□#,İ□CNAME ,i,©,í,è,É LIBRARY ,đŽg,µ□B, , ,x,Å,İf,fWf...[f<'è<`ftf@fCf<,Å,í
NAME •¶,Û,½,í LIBRARY •¶,đŽw’è, ,é•K—v,ª, ,é,ª□C—¼•û,Æ,àŽw’è, ,é,±,Æ,í•s
%ºÅ□BŽw’è,µ,½-¼‘O,İŽÀ□sCE`Ž@ftf@fCf<,Æ“ ,¶,Å,È, ,é,í,È,ç,É,ç
• DESCRIPTION ,İfAfvfŠfP□[fVf#f“ ,Û,½,İf%ofCfuf%ofŠ,đ□à-¾, ,é•¶Žš—ñ,đŽw’è, ,é
• EXETYPE ,í WINDOWS ,Û,½,í OS2 ,i,ç, ,é,©,đŽw’è, ,é□B ,½,¾,µ□CC++Builder
,İ□;%ºñ,İfo□[fWf#f“ ,Å,í WINDOWS ,i,Û,đfTf□[fg
• CODE ,İfR□[fhfZfOf□[fg,İffftfHf<fg,İ’@□«,đ’è<` , ,é□BMOVEABLE
fİfvfVf#f“ ,İ□CfR□[fhfZfOf□[fg,ªŽÀ□sŽž,Éf□f,š“à,Å^Ú“@ ,Å,« ,é,±,Æ,đŽ|,·
• DATA ,İff□[f^fZfOf□[fg,İffftfHf<fg,İ’@□«,đ’è<` , ,é□BMOVEABLE
,İ□CŽÀ□sŽž,Éf□f,š“à,Å^Ú“@ ,Å,« ,é,±,Æ,đŽ|,·□BWindows
,Å,İ□CfAfvfŠfP□[fVf#f“ ,i•i□ ,İfCf“fXf^f“fX,đ 1 “x,ÉŽÀ□s%ºÅ“\□B,±,İ,½,ß□CMULTIPLE
fİfvfVf#f“ ,đŽw’è, ,é,Æ□CSmŽÀ,ÉfAfvfŠfP□[fVf#f“ ,İšefCf“fXf^f“fX,ª,» ,é,¼,è,İff□[f^fZfOf□[fg,đŽ
□,Å
• HEAPSIZE ,İfAfvfŠfP□[fVf#f“ ,İf□□[fİf<fq□[fVfTfCfY,đŽw’è, ,é
• STACKSIZE ,İfAfvfŠfP□[fVf#f“ ,İf□□[fİf<fXf^fbfNfTfCfY,đ Žw’è, ,é□BSTACKSIZE
•¶,đ .DLL ,İfXf^fbfN□i□- ,É,İŽg,İ,È,ç
• EXPORTS ,İ□C•É,İfAfvfŠfP□[fVf#f“ ,Û,½,í Windows ,©,çÆÄ,Ñ□o,³,è,é WHELLO
fAfvfŠfP□[fVf#f“ ,İŠÖ□“ ,đ^è—•Ž|, ,é□B•É,İf,fWf...[f<,©,çÆÄ,Ñ□o,³,è,é,æ,µ,É□i□- ,³,è,Å,ç
,éŠÖ□“ ,İfR□[f<fofbfN□CfR□[f<fofbfNŠÖ□“□C,Û,½,İfGfNfXf□[fgŠÖ□“ ,ÆÆÄ,İ,è,é
• C++Builder ,Å’ñ<Û,³,è,Å,ç,é _export fL□[f□□[fh,đŽg,µ,Æ□C’ ,ç EXPORTS
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/WS□C,Û,½,İ□mfİfvfVf#f“(O)□bfvf□WfFfNfg(P)□b16 frfbfgfRf“fpfCf%º□bEntry/Exit
fR□[fh□bWindows fXf}□[fgfR□[f<fofbfN□C’SŠÖ□“fGfNfXf□[fg%ºÅ“(S)□n□j,đŽg,µ
,Æ□CfR□[f<fofbfNŠÖ□“ ,đ EXPORTS •¶,Å—ñ<“ ,µ,½,è _export fL□[f□□[fh,ÅŽw’è, ,é•K—v,ª,È, -
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,ªŽ©“@“İ,ÉŽæ,è□ž,Û,è,é,±,Æ,ÅfCf“f□[fg,³,è,é□BfAfvfŠfP□[fVf#f“ ,Å•É,İŠÖ□“ŠÖ□“ ,đÆÄ,Ñ□o,•K
—v,ª , ,é□è□#,É,İ□CSÖ□“ ,đ IMPORTS •¶,ÅŽw’è, ,é,©fCf“f□[fgf%ofCfuf%ofŠ ,©,çŽæ,è□ž,ß
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fAfvfŠfP□[fVf#f“ —p,İ’g,Û□ž,ÛfXf^fu,đŽg,ç,Û,·□B,±,İ’g,Û□ž,ÛfXf^fu,İ’P,ÉfAfvfŠfP□[fVf#f“ ,ª
Windows ŠÅ««^ÈŠO,ÅŽÀ□s,³,è,½□è□#,Éf□□[fh,³,é□CWindows ,ª•K□{ ,Æ,ç,µf□fbfZ□[fW,đ□o—
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p,³,ê,é“Á’è,ì•ŕŽš,Æ’uŠ,³,ê,é 3 •ŕŽš,ìfV[fPf“fX,Å,·BfRf“fpfCf%o,Åfgf%ofCfOf  
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