

## **ff[f^ f}f[fWff**

ff[f^ f}f[fWff,đŽg—p,;,é,ÆMicrosoft Jet ff[f^fx[fX,đV,μ,ñiñ-,;é,±,Æ,â,À,«,Û,·B,Û,½AŠeŽíC`Ž@,lf[f^fx[fX,đ²,x,½,èAf}fbfv,;é,±,Æ,â,À,«,Û,·B,Û,½AŠO•”ff[f^fx[fX,©,cfAf^fbf` fe[fuf<,đññ-,;é,±,Æ,à,À,«,Û,·B

ff[f^ f}f[fWff

ñV<Kff[f^fx[fX,ìññ=

ñV<Kfe[fuf<,ìññ=

ñV<KfCf”ffbfNfX,ìññ=

fCf”ffbfNfX'C%oÁŽž,ìGf%oñ

[ftf@fCf<] fñfif...ñ[,ìfRf}f”fh

fe[fuf<,ìff[f^,ì'€ñ

ff[f^fx[fX flfufWfFfNfg,ì-¼'O•t,̄<K¥

fe[fuf<ŠÖ,ìfŠfCñ[Vf#f”

fe[fuf<,ìfAf^fbf`

'½'ì'½fŠfCñ[Vf#f”

SQL fXfe[fqfñf”fg

## ff[f^ f]f[fWff

, ±, ĩfAvfšP[fVf#f“, đŽg—p, ·, é, Æ Microsoft Jet ff[f^fx[fX, đV, μ, ñ, ·, ·, é, ±, Æ, ð, Ā, «, Ű, ·B, Ű, ½AŠeŽíĀ`Ž®, ĩff[f^fx[fX, đ’², x, ½, èAf}fbfv, ·, é, ±, Æ, ð, Ā, «, Ű, ·B, Ű, ½AŠO•”ff[f^fx[fX, ©, ċfAf^fbf` fe[fuf<, đñ, ·, ·, é, ±, Æ, à, Ā, «, Ű, ·BŽŸ, ĩ·\, ĩAf[f^fx[fX, ĩŽí—p, Æ, »), ĩff[f^fx[fX, É’Ī, μ, Ā%Ā”\, É’€ñ, đŽ, μ, Ā, ċ, Ű, ·B

**ff[f^fx[fX, ĩŽí—p %Ā”\, É’€ñ**

---

Microsoft Access	ñ, · AfAf^fbf` Af}fbfv
Paradox 3.XA4.X	fAf^fbf` Af}fbfv
dBASE IIIAIV	fAf^fbf` Af}fbfv
FoxPro 2.0A2.5	fAf^fbf` Af}fbfv
Btrieve	fAf^fbf` Af}fbfv
ODBC	fAf^fbf` Af}fbfv

Visual Basic, Ā, ĩ Microsoft Access, Æ””, ĩff[f^fx[fX fGf“fWf“, đŽg—p, μ, Ű, ·B Visual Basic, Ű, ½, ĩff[f^f}f[fWff, Āñ, ·, μ, ½ff[f^fx[fX, ĩ Microsoft Access, Āñ, ĩ Microsoft Access, Āñ, ·, μ, ½ff[f^fx[fX, ĩ Visual Basic, ·, æ, ĩff[f^f}f[fWff, Āñ, ·, Ā, «, Ű, ·B, ±, ĩfwf<fv ftf@fCf<, ĩ Visual Basic, Ű, ½, ĩ Jet ff[f^fx[fX (Visual Basic Microsoft Access A, Ű, ½, ĩff[f^f}f[fWff, Āñ, ·, μ, ½ff[f^fx[fX), đ’ñŰ, É, μ, Ā, ċ, Ű, ·B

V<Kff[f^fx[fX,ì]ì-  
SÖ~A□€-Ú

ff[f^f}f[]fWff,Å[]- ,μ,½ff[f^fx[fX,Í Microsoft Jet ff[f^fx[fX,Å, ,è[]AMicrosoft Access Version 2.0  
, ,æ,Ñ Visual Basic Version 4.0 ,ì-¼•ù,Å•Ò[]W, ,é,±,Æ,ª,Å,«,Û,·[]B

[ff[f^f}f[]fWff] fEfBf"fhfE,ì [ftf@fCf<] - [V<Kff[f^fx[fX,ì]ì-] fRf}f"fh,ð'ì'ð,μ,Û,·[]Bff[f^fx[fX  
ftf@fCf<,ð•Û'¶, ,éftfHf<f\_,ð'ì'ð,μ,Û,·[]B[V<KftfHf<f\_,ð[]ì- , ,é,Æ,«,ì[]A[V,μ,çftfHf<f\_,ì[]ì-]  
f{f^f",ð'ì'ð,μ,Û,·[]BŽŸ,Éftf@fCf<-¼,ð"ü-í,μ,Û,·[]B,È, "[]Aftf@fCf<-¼,ìŠg'£Žq,É,í .MDB ,ðŽw'è,μ,Û,·[]B,±  
,ìf\_CfAf[]fO f{fbfNfX,Å[]ASù'¶,ì .MDB ftf@fCf<,ì-¼'O,ð"ü-í,μ,½,è[]A'ì'ð, ,é,±,Æ,ì,Å,«,Û,¹,ñ[]B[•Û'¶]  
f{f^f",ð'ì'ð,μ,Å[]A[V,μ,çff[f^fx[fX-¼,ð[]Ÿ'è,μ,Û,·[]B

[]V,μ,çff[f^fx[fX ftf@fCf<,ð[]ì- ,μ,½,ç[]Aff[f^,ðŠì"[][, ,éfe[][fuf<[]AftfB[][f<fh[]A, ,æ,ÑfCf"fffbfNfX,ð'Ç  
%oÅ,μ,Û,·[]B

ŠÖ~A€-Ú

V<Kfe[fuf<.l]i

**V<Kfe** [fuf<,l]i~  
 ŠÖ~A€-Ü

ff[f^fx][fX,iff[f^,íA,·,x,Äfe[fuf<,ÉŠi"["<sup>3</sup>,é,Ü,·BSeffe[fuf<,íA1  
 ,Á,Ü,½,í·;],lftfB[f<fh,íW,Ü,è,Æ,μ,Á'è<<sup>3</sup>,é,Ü,·BSeftfB[f<fh,íAftfCfY[A,·,æ,Ñ,»<sup>1</sup>¼,í'  
 ®<«<sup>3</sup>,ðŽw'è,μ,ÄŠi"["<sup>3</sup>,é,éff[f^,íŽí—p,ðŽ!,μ,Ü,·B

fe[fuf<]i~<sup>3</sup>,Ä,íAŠÖ~A,·,éff[f^,ðfOf<[fv%»<sup>3</sup>,μ,Ü,·B,½,Æ,í,íABIBLIO.MDB fTf"fvf<  
 ff[f^fx][fX,Ä,íAŠe"o"ÄŽÐ,ÉŠÖ,·,éí·ñ,<sup>a</sup> Publishers fe[fuf<,ÉŠi"["<sup>3</sup>,é,Ä,ç,Ü,·B,Ü,½A1  
 ,Á,í"o"ÄŽÐ,<sup>a</sup>·;],í"ð,·,æ,Ñ·;],í"ŽÖ,í"·,ð"o"Ä,·,é,½,βA"ŽÖ,·,æ,Ñ"ð,ÉŠÖ,·,éí·ñ,íA·É,ife[fuf<  
 uf<,É,»<sup>3</sup>,é,¼,éŠi"["<sup>3</sup>,é,Ä,ç,Ü,·B

**V<Kfe** [fuf<,l]i~

1. fe[fuf<,ðV,μ,í~<sup>3</sup>,·,é,É,íAife[fuf</fNfGfŠ][f fCfAfO f{fbfNfX,í [V<K]i~  
 ,ð'í'ð,μ,Ü,·B[V<Kfe[fuf<,í'Ç%Á] f fCfAfO f{fbfNfX,<sup>a</sup>·Ž!,<sup>3</sup>,é,Ü,·B
2. fe[fuf<-¼,ÆftfB[f<fh-¼,ð"ü—í,μAiff[f^CE^] f{fbfNfX, ©,çff[f^CE^,ð'í'ð,μ,Ü,·BŽŸ,É [·,]  
 f{f^f",ð'í'ð,μ,ÄAftfB[f<fh-¼,ðfŠfXfg,É'Ç%Á,μ,Ü,·BfŠfXfg"à,ÄftfB[f<fh-¼,ð"ü"®<sup>3</sup>,·,é,É,íA[ä,Ö]  
 ,·,æ,Ñ [%<sup>a</sup>,Ö] f{f^f",ð'í'ð,μ,Ü,·B
3. fe[fuf<,ð·Ü'¶,·,é,É,íA[OK] f{f^f",ð'í'ð,μ,Ü,·B  
 ŽŸ,íf{f^f",ðŽg—p,μ,Äfe[fuf<,ð^—,·,é,±,Æ,<sup>a</sup>Ä,«<sup>3</sup>,Ü,·B

**f{f^f"**

**"à—e**

[Š],	Žw'è,μ,½ff[f^fx][fX,íŠù'¶,ife[fuf<,ðŠ],«Aftf[f^,ð·Ž!,μ,Ü,·B
[V<K]i~]	[V,μ,fe[fuf<,ði~ <sup>3</sup> ,μ,Ü,·B
[fffUfCf"]	Šù'¶,ife[fuf<,ðŠ],«Afe[fuf<,íV'ç,ð·Ž!,Ü,½,íC <sup>3</sup> ,μ,Ü,·B
[í]œ]	Šù'¶,ife[fuf<,ðí]œ,μ,Ü,·B
[Af^fbf` fe[fuf<]	[V,μ,çfe[fuf<,lfAf^fbf` A,Ü,½,íŠù'¶,ife[fuf<,íÄAf^fbf` ,ðs,ç ,Ü,·B
[fŠfCE][fvf#"]	fe[fuf<ŠÖ,iff[f^,íŠÖ~A·t,·,ð'è< <sup>3</sup> ,μ,Ü,·B

ftfB[f<fh-¼,íV·¶,íAftfB[f^fx][fX fGf"fwf",íŽí—p,É,æ,Ä,Ä^Ü,É,è,Ü,·BJet  
 ff[f^fx][fX,Ä,íAftfB[f<fh-¼,íV·¶,íA'¼,iff[f^fx][fX flfufWfFfNfg,íV  
 ·¶,Æ"·,¶,Ä,·B[uftf[f^fx][fX flfufWfFfNfg,í-¼'·t,·K'¥v,ðŽQÆ,μ,Ä,-  
 ,¾,<sup>3</sup>,çBff[f^CE^,íAftfB[f<fh,ÉŠi"["<sup>3</sup>,é,Ä,ç,éí·ñ,íŽí—pA,½,Æ,í,íA"Žš,Ü,½,í·¶Žš—  
 ñ,ðŸ'è,μ,Ü,·B,Ü,Æ,ñ,ç,iff[f^CE^,Ä,íAftfCfY,íŽ"®"í,ÉŸ'è,<sup>3</sup>,é,Ü,·BfefLXfg  
 ftfB[f<fh,Ä,íAftfB[f<fh,íÄ'á·K—vfofCfG",ð"ü—í,μ,Ü,·B,½,¾,μAfCEfR[fh,íÄ'á·,íA2,000  
 fofCfG,É]ŠCEÄ,<sup>3</sup>,é,Ä,ç,Ü,·B

---

' [ ff[f^fx][fX,ÉftfB[f<fh,ð'Ç%Á,·,é,±,Æ,í,Ä,«<sup>3</sup>,Ü,·,íAftfB[f<fh,í-  
 ¼'·t,ð·íX[A]C<sup>3</sup>A,Ü,½,íí]œ,·,ééê¶,íAfe[fuf<'S'í,ðí]œ,μAŠeftfB[f<fh,ð,à,x^è"x]i~<sup>3</sup>,·,éK—  
 v,<sup>a</sup>,è,Ü,·B,μ,½,<sup>a</sup>Ä,ÄAfe[fuf<,ðYCEv,·,é,Æ,«<sup>3</sup>,í'í'Ó,μ,Ä,<sup>3</sup>,¾,<sup>3</sup>,çB

---

**ŠÖ~A€-Ú**

Šù'ŋ.ìfe[fuf<,đš].

ff[f^fx[fX\'.t.ì.ïX

fe[fuf<,ìííœ

**fe[]fuf<,i[]'¢**  
**SÖ~A[]€-Ü**

- K—v,ĚftfB[]f<fh,ð,·,x,Ä[]i[]¬,μ,½CEä,Äfe[]fuf<,i[]'¢,ð•Ö[]W,·,é,É,í[]A[fe[]fuf</fNfGfŠ[]] f\_fCfAf[]fO f{fbfNfX,i^è—,©,çfe[]fuf<,ð'ì'ð,μA[fffUfCf''] f{f^f",ð'ì'ð,μ,Ä [fe[]fuf< fGfffBf^) f\_fCfAf[]fO f{fbfNfX,ðŠ},«.,Ü,·[]B

ŽŸ,ìf{f^f",ðŽg—p,μ,Ä[]Afe[]fuf<,i[]'¢,ð•ì[]X,·,é,±,Æ,a,Ä,«,Ü,·[]B

<b>f{f^f"</b>	<b>"à—e</b>
[•Ö[]W]	Šù'¶,ìftfB[]f<fh,ð•Ö[]W,μ,Ü,·[]B
[ 'Ç%oÁ]	[]V,μ,çftfB[]f<fh,ð'Ç%oÁ,μ,Ü,·[]B
[]i[]œ]	Šù'¶,ìftfB[]f<fh,ð[]i[]œ,μ,Ü,·[]B
[fCf'']fffbfNfX]	fCf'']fffbfNfX,ð•Ö[]W[]A'Ç%oÁ[]A,Ü,½,í[]i[]œ,μ,Ü,·[]B
[fL[]]	ŽâfL[],·,æ,ÑŠO•"fL[],ð'ì'ð,μ,Ü,·[]B
[•Ä,¶,é]	[fe[]fuf< fGfffBf^) f_fCfAf[]fO f{fbfNfX,ð•Ä,¶,Ü,·[]B

- [fe[]fXfGfffBf^) f\_fCfAf[]fO f{fbfNfX,i [fCf'']fffbfNfX] f{f^f",ð'ì'ð,μ,Ä[]A[fCf'']fffbfNfX] f\_fCfAf[]fO f{fbfNfX,ðŠ},«.,Ü,·[]B[ 'Ç%oÁ] f{f^f",ð'ì'ð,μ,Ä[]Afe[]fuf<,É•K—v,ĚfCf'']fffbfNfX,ð[]i[]¬,μ,Ü,·[]B

'Êí[]A,±,ìfCf'']fffbfNfX,ðŽg—  
 p,μ,Ä[]AfpftfH[]f}f"fx,ðCEü[]ä,³,¹,½,è[]Afe[]fuf<"à,ì[]d•i,μ,½fCEfR[]f<fh,ð[]i[]œ,μ,Ü,·[]B

ftfB[]f<fh,i[]è[]±,Æ"¬—l,É[]Afcf'']fffbfNfX-¼,i[]\•¶,í[]Afff[]f^fx[]fX fGf"fwf",ìŽí—  
 p,É,æ,Ä,Ä^Ü,È,è,Ü,·[]BJet ff[]f^fx[]fX,Ä,í[]Afcf'']fffbfNfX-¼,i[]\•¶,í[]A'¼,ìff[]f^fx[]fX flfufWfFfNfg,i[]\•¶,Æ"¬,¶,Ä,·[]B[]uff[]f^fx[]fX flfufWfFfNfg,i-¼'°•t,¬<K'¥[]v,ðŽQ[]Æ,μ,Ä,·,¼,³,ç[]B

- ^è—,©,ç 1,Ä,Ü,½,í,·;[]],ìftfB[]f<fh-¼,ð'ì'ð,μA[ 'Ç%oÁ] f{f^f",ð'ì'ð,μ,Ä[]A,±,é,ç,ìftfB[]f<fh-¼,ð [fCf'']fffbfNfX'+,ìftfB[]f<fh] f{fbfNfX,É'Ç%oÁ,μ,Ü,·[]B

,±,é,ç,ìftfB[]f<fh,i"à—e,É,æ,è[]A,Ç,ì,æ,x,Éfe[]fuf<,ð•Ä,x'Ö,ì,é,©[]A,Ü,½,í,Ç,ì,æ,x  
 ,ÉCE%oÉ,ð•Ö,·,©,ðŸ'è,μ,Ü,·[]BfCf'']fffbfNfX,ð[]i[]¬,·,é,Æ,«[]AftfB[]f<fh",É[]\$CEÄ,í,è,Ü,¹,ñ,°[]AftfB[]f<fh-¼'S'ì,ì'·,³,í 254 •¶Žš^É"à,É[]\$CEÄ,³,é,Ä,ç  
 ,Ü,·[]B,³,ç,É[]A^è•",ìftfB[]f<fh,ìfCf'']fffbfNfX,Æ,μ,ÄŽw'è,Ä,«,Ü,¹,ñ[]B,½,Æ,ì,í[]Afff,CE^,ìftfB[]f<fh,à  
 OLE flfufWfFfNfgCE^,ìftfB[]f<fh,ìŽw'è,Ä,«,Ü,¹,ñ[]B

- Visual Basic ,Ä[]A,±,ìfCf'']fffbfNfX,ðŠì,Éfe[]fuf<"à,ìfCEfR[]f<fh,i[]d•i,ð"ð,¬,é,É,í[]A[ 'l—v<[]] ,·,æ,Ñ [CEÄ—  
 LfCf'']fffbfNfX] f'fFfbfN f{fbfNfX,ðflf",É,μ,Ü,·[]BVisual Basic ,Ä,±  
 ,ìfCf'']fffbfNfX,ðŽâfCf'']fffbfNfX,Æ,μ,ÄŸ'è,·,é,É,í[]A[ŽâfL[]] f'fFfbfN f{fbfNfX,ðflf",É,μ,Ü,·[]B

- [ 'Ç%oÁ-[] ,[]#] ,Ü,½,í [ 'Ç%oÁ-[]~[]#] f{f^f",ð'ì'ð,μ,Ä[]A,±,ìfCf'']fffbfNfX,ðŠì,Éfe[]fuf<,i•Ä,x'Ö,ì•ù-  
 @,ðŽw'è,μ,Ü,·[]B

- K—v,ĚfCf'']fffbfNfX,ð,·,x,Ä[]i[]¬,μ,½,ç[]A[OK] f{f^f",ð'ì'ð,μ,Ü,·[]B

ff[]f^fx[]fX[]'¢,ð[]i[]¬,μ,½CEä[]A,»,ìff[]f^fx[]fX,Éff[]f^,ð"ü—í,·,é,½,ß,ì Visual Basic  
 fAfvfŠfP[]fVf#f",ð[]i[]¬,μ,½,è[]Afff[]f^f]f[]f[]fWff,ðŽg—  
 p,μ,Äfe[]fuf<,ðŠ},«'¼[]Ü•Ö[]W,μ,½,è,Ä,«,Ü,·[]B[]uŠù'¶,ìfe[]fuf<,ðŠ],[]v,·,æ,Ñ[]uff[]f^fx[]fX[]'¢  
 ,ì•ì[]X[]v,ðŽQ[]Æ,μ,Ä,·,¼,³,ç[]B

**ŠÖ~A€-Ú**

Šù'ŋ.ìfe[fuf<,ðŠ].

ff[f^fx[fX\ç,ì•ïX

fe[fuf<,ìííœ

Šù‘ŋ, ìfe [fuf<, ðŠ],  
ŠÖ~A [€-Ú]

Šù‘ŋ, ìfe [fuf<, ðŠ], ,É, í [ftf@fCf<] - [ff [f^fx [fX, ðŠ], ] fRf}f“fh, ð‘l‘ð, µ [Aftf@fCf<, ðŽw‘è, µ, Ä [Š], ]  
f{f^f“ , ð‘l‘ð, µ, Ü, · [B [fe [fuf</fNfGfŠ [ ] f\_fCfAf [fO f{fbfNfX, l^è—, ©, çfe [fuf<-¼, ð‘l‘ð, µ [A[Š], ]  
, ð‘l‘ð, µ, Ü, · [B

ŠÖ~A€-Ú

V<Kfe[fuf<.l]i

**fe[]fuf<,ì[]í[]œ**  
SÖ~A[]€-Ú

Šù'¶,ìfe[]fuf<,ð[]í[]œ,·,é,É,í[]A[]ftf@fCf<} - [ff[]f^fx[]fX,ðŠJ,] fRf}f"fh,ð'l'ð,μ[]Aftf@fCf<,ðŽw'è,μ,Ä [ŠJ,]  
f{f^f",ð'l'ð,μ,Ü,·[]B[]fe[]fuf</fNfGfŠ[][] f\_jCfAf[]fO f{fbfNfX,í^è—,©,çfe[]fuf<-¼,ð'l'ð,μ[]A[]í[]œ[]  
f{f^f",ð'l'ð,μ,Ü,·[]B[]fA^fbf`  
fe[]fuf<,ð[]í[]œ,μ,Ä,à€³,ìfe[]fuf<,í[]í[]œ,³,ê,·[]AfA^fbf` ,ìÝ'è,¾, ¯,ª[]í[]œ,³,ê,Ü,·[]B

ŠÖ~A€-Ú

V<Kfe[fuf<.l]i

ff[f^fx[fX\c,i•iX

[fe[fuf</fNfGfŠ[] f\_fCfAf[]fO f{fbfNfX,i^è—,©,çŠù‘¶,ife[fuf<-¼,ð‘l’ð,μ[]A[ffUfCf“]  
f{f^f“,ð‘l’ð,μ,Å[]A[fe[fuf< fGfffBf^] f\_fCfAf[]fO f{fbfNfX,ðŠ),«,Û,·[]B,±,lf\_fCfAf[]fO  
f{fbfNfX,Å[]AftfB[]f<fh,i•Ò[]W[]A‘Ç%°Å[]A,“,æ,N[]i[]œ,ð,μ,½,è[]Afl[],ðZw’è,Å,«,Û,·[]B

□V<KfCf“ffbfNfX,ì□□-

1. [fe□[fuf</fNfGfŠ□] f\_fCfAf□fO f\_{fbfNfX,ÅŠù'¶,ìfe□[fuf<-¼,ð'ì'ð,μ□A[fffUfCf"] f{f^f",ð'ì'ð,μ,Ü,·□B[fe□[fuf< fGfffBf^] f\_fCfAf□fO f\_{fbfNfX,ª•\Ž;³,è,Ü,·□B
2. [fCf“ffbfNfX] f{f^f",ð'ì'ð,μ□A[‘Ç%oÁ] f{f^f",ð'ì'ð,μ,Ü,·□BfCf“ffbfNfX-¼,ð“ü—Í,μ□A•K—v,È□€—Ü,ð□Ý'è,μ,Ü,·□B[fe□[fuf<'t,ìftfB□[f<fh] f{fbfNfX,©,ç 1 ,Ä,Ü,½,Í•;□",ìftfB□[f<fh-¼,ð'ì'ð,μ□A[‘Ç%oÁ] f{f^f",ð'ì'ð,μ,Ü,·□B  
 'ì'ð,μ,½ftfB□[f<fh-¼,Í□A[fCf“ffbfNfX't,ìftfB□[f<fh] f{fbfNfX,É^Ú“ @,μ,Ü,·□B,±,è,ç,ìftfB□[f<fh,ì“à—e,É,æ,è□A,Ç,ì,æ,α,Éfe□[fuf<,ð•Ä,x'Ö,ì,é,©□A,Ü,½,Í,Ç,ì,æ,α  
 ,ÉÇ<%oÉ,ð•Ö,; ,©,ð□Ý'è,μ,Ü,·□BfCf“ffbfNfX,ð□□-,·,é,Æ,«□AftfB□[f<fh□”,É□\$ÇÄ,í, ,è,Ü,¹,ñ,ª□AftfB□[f<fh-¼'S'ì,ì',³,Í 254 •¶ŽŠ^É“à,É□\$ÇÄ,³,è,Ä,ç  
 ,Ü,·□B,³,ç,É□A^è•”,ìftfB□[f<fh,ÍfCf“ffbfNfX,Æ,μ,ÄŽw'è,Ä,«,Ü,¹,ñ□B,½,Æ,ì,Í□A□f,ÇE^,ìftfB□[f<fh,â OLE flfufWfFfNfgÇE^,ìftfB□[f<fh,ÍŽw'è,Ä,«,Ü,¹,ñ□Bfe□[fuf<,É•K—v,ÈfCf“ffbfNfX,ð,·,x,Ä□□-,μ,Ü,·□B  
 ftfB□[f<fh,ì□ê□±,Æ“—l,É□A fCf“ffbfNfX-¼,ì□\•¶,Íff□[f^f×□[fX fGf“fWf“,ìŽí—  
 p,É,æ,Ä,Ä^Ü,È,è,Ü,·□BMicrosoft Jet ff□[f^f×□[fX,Ä,Í□A fCf“ffbfNfX-¼,ì□\•¶,Í□A'¼,Íff□[f^f×□[fX  
 flfufWfFfNfg,ì□\•¶,Æ“—,¶,Ä,·□B□uff□[f^f×□[fX flfufWfFfNfg,ì-¼'0•t,~<K'¥□v,ðŽQ□Æ,μ,Ä,,³/4,³,ç□B
3. •K—v,ÈfCf“ffbfNfX,ð,·,x,Ä□□-,μ,½,ç□A[OK] f{f^f",ð'ì'ð,μ,Ü,·□B

---

'□ É□í□A fCf“ffbfNfX,ðŽg—  
 p,μ,Ä□AfpftfH□[f}f“fX,ðÇEü□ã,³,½,è□Afe□[fuf<“à,ì□d•jfÇE fR□[fh,ð□í□œ,μ,Ü,·□B

---

[ftf@fCf<] f[]ffj...[][,lfRf})f“fh

[ftf@fCf<] f[]ffj...[][,Å,í[]AZÿ,lfRf})f“fh,ð—~—p,Å,«,Û,·[]B

**fRf})f“fh**

---

[]V<Kff[]f^fx[]fX,ì[]i[]-]

[ff[]f^fx[]fX,ðŠ,]

[ff[]f^fx[]fX,ì[]Å“K%»]

[ff[]f^fx[]fX,ì[]İŠ·]

[ff[]f^fx[]fX,ì[]Ã[]+%»]

[ff[]f^fx[]fX,ì[]%»ð“Ç]

[ff[]f^fx[]fX,ì[]C·œ]

[ff[]f^ f})f[]fWff,ì[]-¹]

fCf“ffbfNfX’Ç%oÁžž,lfGf%o[]

fCf“ffbfNfX,đ[]□→,·,é,Æ,«[]AftfB[]lf<fh[]”,É[]\$CEÀ,Í, ,è,Ü,<sup>1</sup>,ñ,<sup>a</sup>[]AftfB[]lf<fh-¼‘S’ì,ì’<sup>3</sup>,í 254

•¶Žš^É“à,É[]\$CEA,<sup>3</sup>,ê,Á,ç

,Ü,·[]B,<sup>3</sup>,ç,É[]A^è•”,lf<fh[]lf<fh,lfCf“ffbfNfX,Æ,μ,Ážw’è,Á,«,Ü,<sup>1</sup>,ñ[]B,½,Æ,!,î[]Af[]f,CE^,lf<fh[]lf<fh,Ü,½,í  
OLE flfufWfFfNfg,lf<fh[]lf<fh,Ížw’è,Á,«,Ü,<sup>1</sup>,ñ[]B

## ff[fuf<,lff[f^,l'€]

ff[f^,ð^—,·,é,É,íA,Ü,·,fe[fuf<,ðŠ],«AŠ],ç,½fe[fuf<,É•K—v,È^—,ðs,ç,Ü,·B

- fCFR[fh,ì“à—  
e,ð•ìX,·,é,É,íAŠeftfB[f<fh,ð'í'ð,μ,Äff[f^,ð•ÒW,μ,Ü,·B•ìXCEãA•Ê,ìfCFR[fh,É^Ú“®,·,é,ÆA•ìX“à  
—e,³ff[f^fx[fX,É•Ú'¶,³,ê,Ü,·B
- V,μ,çfCFR[fh,ðfe[fuf<,ìÅCEã,É'Ç%Á,·,é,É,íA['Ç%Á] f{f^f“,ð'í'ð,μAftfB[f<fh,Éff[f^,ð“ü—  
í,μ,Ü,·B[XV] f{f^f“,ð'í'ð,μ,Á•ìX“à—e,ð•Ú'¶,μ,Ü,·B
- fJfCF“fg fCFR[fh,ðí[œ,·,é,É,íA[í[œ]  
f{f^f“,ð'í'ð,μ,Ü,·BfCFR[fh,í,·,®,Éí[œ,³,êA•œCE³,Å,«,Ü,¹,ñB
- “Á'è,ìfCFR[fh,ðCE©,Á,·,é,É,íA[CEÿ[ð] f{f^f“,ð'í'ð,μ,Ü,·BCEÿ[ð,·,éftfB[f<fhA%  
%oŽŽŽqA,“,æ,Ñ'í,ð'í'ð,μ,Ü,·B,±,ìŽ®,ì\•¶,íAVisual Basic ,lfl“f%ofCf“ fwf<fv,ÅŽ!,³,é,é Find f\fbfh,ì\  
•¶,Æ““,¶,Å,·B'Ê[A,±,ì\•¶,íASQL (Structured Query Language) ,ì WHERE <à,ì\•¶,ÆŽ—,Ä,ç,Ü,·B
- fCFR[fh,ðÄ,ÑŽæ“¾,·,é,É,íA[Ä•Ž!] f{f^f“,ð'í'ð,μ,Ü,·B

# ff[]f^fx[]fX flfufWfFfNfg,ì-¼'O•t,¯<K'¥

Visual Basic ff[]f^fx[]fX flfufWfFfNfg,ì-¼'O•t,¯,ÉŠÖ,μ,Ä[]A'Á'è,ì<K'¥,ª, ,è,Ü,·[]BVisual Basic ,Å,í[]A[]Å'å 64  
•¶Žš,ìff[]f^fx[]fX flfufWfFfNfg-¼,ð[]Ý'è,Å,«,Ü,·[]BflfufWfFfNfg-  
¼,Æ,μ,Ä[]AfAf<ftf@fxfbfg[]A,Đ,ç,ª,È[]Afj^fjfi[]A[]"Žš[]AfXfy[]fX[]A, ",æ,Ñ"ÁŽê•¶Žš,ì^è•",ð'g,Ý[]#,í,¹,Ä[]Ý'  
è,Å,«,Ü,·[]B,½,¾,μ[]A'ÁŽê•¶Žš,ìfsfŠflfh (.)[]AŠ'Q•„ (!)[]A, ",æ,ÑŠp,©,Á,± ([ ]),ÍŽg—  
p,Å,«,Ü,¹,ñ[]B,Ü,½[]A[]æ"ª,ÉfXfy[]fX,ð"ü,ê,½,è[]A[]\$€ä•¶Žš (ASCII fR[]fh,ª 0 ,©,ç 32 ,Ü,Å,ì•¶Žš) ,ðŽg—  
p, : ,é,±,Æ,í,Å,«,Ü,¹,ñ[]B

**fe[fuf<ŠÖ,lfŠfCE[fVf#f“**

lfe[fuf</fNfGfŠ[] f\_fCfAf[]fO f{fbfNfX,ì^è—,©,çfe[fuf<-¼,ð'ì'ð,μ,Û,·[]B[fŠfCE[fVf#f“]  
f{f^f“,ð'ì'ð,·,é,Æ[]A[fŠfCE[fVf#f“] f\_fCfAf[]fO f{fbfNfX,·\Ž,³,è,Û,·[]B,±,lfŠfCE[fVf#f“] f\_fCfAf[]fO  
f{fbfNfX,Å[]Aff[]f^fx[]fX,lfe[fuf<ŠÖ,lfŠfCE[fVf#f“,ð'è<,·,é,±  
,Æ,ª,Å,«,Û,·[]B·i[]”,lfe[fuf<,ðŠì,ÉfNfGfŠ[][,ðŽÀ[]s,μ,½,è[]AftfH[]f€,âfCEf[]fg,ð^—[],·,é[]è[]#[]Aff[]f^  
f}f[]fWff,í[]A,±,è,ç,lfŠfCE[fVf#f“,ðŽg—p,μ,Å[]AŠÖ~A,·,éff[]f^,ðCEY[]ð,μ,Û,·[]B

**[Žâfe[fuf<]**

ff[]f^fx[]fX,lfe[fuf<,ð^è—·\Ž,μ,Û,·[]B·É,lfe[fuf<,ÆŠÖ~A,Å,·,éŽâfL[]  
ftfB[]f<fh,ðŠÛ,bfe[fuf<,ð'ì'ð,μ,Û,·[]B

**[ŽâfL[] ftfB[]f<fh]**

'ì'ð,μ,½Žâfe[fuf<,lŽâfL[] ftfB[]f<fh,ð·\Ž,μ,Û,·[]B

**[Ží—p]**

fŠfCE[fVf#f“,)·û-@,ð[]A[^é^è],Û,½,í [^é^í½],ì,ç,·,è,©,©,ç'ì'ð,μ,Û,·[]B

**fifvfvf#f“ à-¾**

[^é^è] fe[fuf<ŠÖ,ì^é^èfŠfCE[fVf#f“,ðŠm—s,μ,Û,·[]B

[^é^í½] fe[fuf<ŠÖ,ì^é^í½fŠfCE[fVf#f“,ðŠm—s,μ,Û,·[]B

**lfŠfCE[fVf#f“ fe[fuf<]**

ff[]f^fx[]fX,ì,·,x,Å,lfe[fuf<,ð^è—·\Ž,μ,Û,·[]BŽâfe[fuf<,ÆŠÖ~A·t,·,éfe[fuf<,ð'ì'ð,μ,Û,·[]B

**[^é^v,·,éftfB[]f<fh]**

ŠÖ~Afe[fuf<,lftfB[]f<fh,ð^è—·\Ž,μ,Û,·[]BŽâfe[fuf<,lŽâfL[] ftfB[]f<fh,Æ^é^v,·,éftfB[]f<fh,ð'ì'ð,μ,Û,·[]B

**[ŽQ[]Æ[]@[]#[]«]**

ŽQ[]Æ[]@[]#[]«,ð“K—p,·,é,½,ß,É,í[]A,±,lf^fFfbfN f{fbfNfX,ðflf“,É,μ,Û,·[]BŽQ[]Æ[]@[]#[]«,ð“K—  
p,μ,È,ç[]è[]#,í[]A,±,lf^fFfbfN f{fbfNfX,ðflft,É,μ,Û,·[]B

**[’Ç%oÁ] f{f^f“**

Žw'è,μ,½“à—e,É[],Á,Å[]AfŠfCE[fVf#f“,ð[]i[]-,μ,Û,·[]B

**[]i[]œ] f{f^f“**

fŠfCE[fVf#f“,ð[]i[]œ,μ,Û,·[]B

**[CEó·â]**

ŠÖ~Afe[fuf<,ì^t,©,çŽâfL[] ftfB[]f<fh,Æ“·,¶-¼'0,ðŽ[],ÂftfB[]f<fh,ð'T,μ,Û,·[]B

**[·Å,¶,é] f{f^f“**

f\_fCfAf[]fO f{fbfNfX,ð·Å,¶,Û,·[]B

**fe[]fuf<,lfAf^fbf`**

1. [fe[]fuf</fNfGfŠ[]] f\_fCfAf[]fO f\_{fbfNfX,} [fAf^fbf` fe[]fuf<] f{f^f“,đ'ı'đ,μ,Ü,·[]B [fAf^fbf` fe[]fuf<] f\_fCfAf[]fO f\_{fbfNfX,}^{\Z},^,ê,Ü,·[]B
2. []V<K] f{f^f“,đ'ı'đ,μ[]AftfB[]f<fh,É[]î•ñ,đ“ü—ı,μ[]A[fAf^fbf`] f{f^f“,đ'ı'đ,μ,Ü,·[]B

,±,ı'€[],É,æ,è[]A•É,ıff[]f^fx[]fX fAfvfŠfP[]fVf#“,ıfe[]fuf<,Æ,ıfŠf“fN,^[]—,^,é[]A,»,ıfe[]fuf<,ıff[]f^,ı•\Zı,“,æ,Ñ•Ò[]W,^,Ä,«,é,æ,ı,É,É,è,Ü,·[]BfAf^fbf` fe[]fuf<,ı[]ACE^,ıff[]f^fx[]fX fAfvfŠfP[]fVf#“,Ä,à[]E p'±,μ,ÄZg—p,Ä,«[]Aff[]f^fx[]fX f}fı[]fWff,©,ç,àZg—p,Ä,«,Ü,·[]B^1/4,ı Microsoft Jet ff[]f^fx[]fX,ıfe[]fuf<,àfAf^fbf` , ,é,±,Æ,^,Ä,«,Ü,·[]B•É,ıff[]f^fx[]fX,ıfe[]fuf<,đfAf^fbf` , ,é,±,Æ,É,æ,è[]A,»,ıff[]f^fx[]fX,đS),©,É,.,Ä,àfe[]fuf<,đZg—p, , ,é,±,Æ,^,Ä,«,Ü,·[]B

---

'[] Paradox[]ABtrieve[]A,Ü,1/2,ı SQL fT[]fo[] ff[]f^fx[]fX,ıfe[]fuf<,đfAf^fbf` , ,é[]ê[]#[]A^1/4,ıfAfvfŠfP[]fVf#“,Äı'è,^,é,1/2fpfXf[]fh,đZw'è,μ,É, ,é,ı,É,ç,É,ç,Æ,«,^,è,Ü,·[]Bfe[]fuf<,đfAf^fbf` ,μ[]AfpfXf[]fh,đZw'è, ,é,Æ[]Aff[]f^ f}fı[]fWff,ı[]ACEä,Ä,±,ıfe[]fuf<,đS), , ,±,Æ,^,Ä,«,é,æ,ı,É[]A,±,ıfpfXf[]fh,đff[]f^fx[]fX,ÉŠi“ı,μ,Ü,·[]B,±,ı<@“ı,ı[]ASQL fT[]fo[] ff[]f^fx[]fX,Ä,ı[]AÉ—^%Ä“ı,Ä,·[]B,Ü,1/2[]AfpfXf[]fh,đ•Ü[]Eı, , ,é,1/2,ı,É[]AfpfXf[]fh,đZı,ÄfAf^fbf` fe[]fuf<,đSÜ,ıff[]f^fx[]fX,đ^ Ä[]+%», , ,é[]ê[]#,à, ,è,Ü,·[]B

---

Zÿ,ıff[]f^fx[]fX fAfvfŠfP[]fVf#“,ıfe[]fuf<,đfAf^fbf` , ,é,±,Æ,^,Ä,«,Ü,·[]B

- Microsoft Access (Š,ç,Ä,ç,éff[]f^fx[]fX^ÈŠ,ıff[]f^fx[]fX)
- Paradox (version 3.x[]A4.x ,ı .DB ftf@fCf<)
- FoxPro (version 2.0[]A2.5 ,ı .DBF ftf@fCf<)
- dBASE III[]AdBASE IV (.DBF ftf@fCf<)
- Btrieve (ff[]f^'è<`ftf@fCf< FILE.DDF[]AFIELD.DDF •t,«)
- ODBC

SQL ff[]f^fx[]fX,đ^—, ,é[]ê[]#[]A[SQL Server f[]Ofıf“] f\_fCfAf[]fO f\_{fbfNfX,}^{\Z},^,ê,Ü,·[]BŠe ODBC fhf %ofCfo,ıf\_fCfAf[]fO f\_{fbfNfX,}ıfıvıvıf#“,É,Ä,ç,Ä,ı[]AODBC fhf%ofCfo,ÉŠÖ, ,é[]î•ñ,đZQ[]Æ,μ,Ä, ,^,ç,ç[]B

ŠÖ•“fe[]fuf<,đfAf^fbf` ,μ,1/2,ç[]A[fe[]fuf< fGffBf^] f\_fCfAf[]fO f\_{fbfNfX,}É[]A,»,ıfe[]fuf<,ıftfB[]f<fh fvı[]pfefB,đı'è,μ,Ü,·[]B

fAf^fbf` fe[]fuf<,ı[]ç,ı•ı[]X,Ä,«,Ü,^,ñ,^[]AftfB[]f<fh fvı[]pfefB,ıı'è, , ,é,±,Æ,^,Ä,«,Ü,·[]B

'½'í'½fŠfCE[fVf#f" ,ì'è<`

2 ,Â,ìfe[fuf<ŠÔ,ì'½'í'½fŠfCE[fVf#f" ,Â,íA^ê•û,ìfe[fuf<,ì 1  
,Â,ìfCEfR[fh,ð'¼•û,ìfe[fuf<,ì•i" ,ìfCEfR[fh,ÉŠÔ~A•t,~,é,±,Æ,ª,Â,«,Ü,·B

'½'í'½fŠfCE[fVf#f" ,ð'è<` ,·,é,É,íA,±,ì 2 ,Â,ìfe[fuf<,ðCE<#f,·,é,½,ß,ì 3 ,Â,ß,ìfe[fuf<,ðì□¬,μ,Ü,·B

1. '½'í'½fŠfCE[fVf#f" ,ð'è<` ,·,éfe[fuf<,ðì□¬,μ,Ü,·B

2. 3 ,Â,ß,ìfe[fuf<(CE<#f—p,ìfe[fuf<),ðì□¬,μA,±,ìfe[fuf<,É'¼,ì 2 ,Â,ìfe[fuf<,ìŽšfL[  
ftfB[f<fh,ðY'è,μ,Ü,·B,±,ìfe[fuf<,Â,íAZšfL[ ftfB[f<fh,íAŠO•"fL[,Æ,μ,Ä<"\,μ,Ü,·B

3. 3 ,Â,ß,ìfe[fuf<,Â,íAZšfL[,ðA'¼,ì 2 ,Â,ìfe[fuf<,ìŽšfL[ ftfB[f<fh,ð,·,x,ÄŠÜ,p,æ,α,ÉY'è,μ,Ü,·B

4. 2,Â,ìŽšfe[fuf<,Æ 3 ,Â,ß,ìfe[fuf<,Æ,ìŠÔ,ÉA^ê'½fŠfCE[fVf#f" ,ð,»,è,¼,è'è<` ,μ,Ü,·B

---

'□ 3 ,Â,ß,ìfe[fuf<,É,íA'Éí,ìfe[fuf<ì□¬,Æ"~—ì,ÉAZšfL[ ftfB[f<fh^ÈŠO,ìftfB[f<fh,ð'Ç%Á,·,é,±  
,Æ,ª,Â,«,Ü,·B

---

## SQL fXfe[]fgf[]f“fg

ff[]f^fx[]fX,É'í,μ,ÄfNfGfŠ[][,đŽÀ[]s,·,é,É,í[]A,Ü,ff[]f^fx[]fX,đ'í'đ,μ[]AŠ],<,Ü,·[]B[SQL fXfe[]fgf[]f“fg]  
f\_CfAf[]fO f{fbfNfX,Ä[]AfNfGfŠ[][,đ“ü—í,μ[]A[ZA[]s] f{f^f“,đ'í'đ,μ,Ü,·[]BfNfGfŠ[][,đ•Ü'¶],·,é,É,í[]A[•Ü'¶]  
f{f^f“,đ'í'đ,μ[]AŽŸ,É QueryDef flfufWfFfNfg-¼,đ“ü—í,μ[]A[OK] f{f^f“,đ'í'đ,μ,Ü,·[]B[SQL fXfe[]fgf[]f“fg]  
f\_CfAf[]fO f{fbfNfX,ì[]Ý'è,“,æ,N“ü—í,đ[]A<Z,·,é,É,í[]A[fNfŠfA] f{f^f“,đ'í'đ,μ,Ü,·[]B

