

## ff[f^ f}f[fWff

ff[f^ f}f[fWff,đŽg—p,.,é,ÆAMicrosoft Jet ff[f^fx[fX,đV,μ,□□¬,.,é,±  
,Æ,ª,Å,«,Ü,·□B,Ü,½□AŠeŽ(Ā`Ž®,)ff[f^fx[fX,đ'²,x,½,è□Af}fbfv,.,é,±  
,Æ,ª,Å,«,Ü,·□B,³,ç,É□Aft□[fU□[.í□A,±,ìff[f^,ÉfAf^fbf` fe□[fuf<,đ□□¬,.,é,±,Æ,à,Å,«,Ü,·□B

ff[f^ f}f[fWff

□V<Kff□[f^fx□[fX,ì□□¬

□V<Kfe□[fuf<,ì□□¬

□V<KfCf“fffbfNfX,ì□□¬

fGf%□[‘C%□ÁfCf“fffbfNfX

ftf@fCf< f□fjf...□[fRf}f“fh

fe□[fuf< ff□[f^,ì□^—□

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fe□[fuf<ŠÔ,ìfŠfĀ□[fVf†f“

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‘½‘í‘½fŠfĀ□[fVf†f“

SQL fXfe□[fgf□f“fg

## ff[f^ f}f[fWff

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 ,Æ,ª,Á,«,Ü,·□B,Ü,½□AŠeŽí(Ě`Ž®,lf[f^fx[fX,đ'²,x,½,è□Af}fbfv,·,é,±  
 ,Æ,ª,Á,«,Ü,·□B,³,ç,É□Aft□fU□[,í□A,±,lf[f^,ÉfA^fbf` fe□[fuf<,đ□□¬,·,é,±  
 ,Æ,à,Á,«,Ü,·□BŽÝ,ì·\,í□Aff□f^fx[fX,ìŽí—p,Æ,»,lf[f^fx[fX,É'í,μ,Á%oÁ“\,È'€□,đŽ!,μ,Ä,ç  
 ,Ü,·□B

ff[f^fx[fX,ìŽí—p	%oÁ“\,È'€□i
Microsoft Access	□□¬□AfA^fbf` □Af}fbfv
Paradox 3.X□A4.X	fA^fbf` □Af}fbfv
dBASE III□AIV	fA^fbf` □Af}fbfv
FoxPro 2.0□A2.5	fA^fbf` □Af}fbfv
Btrieve	fA^fbf` □Af}fbfv
ODBC	fA^fbf` □Af}fbfv

Visual Basic ,Á,í□AMicrosoft Access ,Æ“¬,¶ff[f^fx[fX fGf“fWf“,đŽg—p,μ,Ü,·□BVisual Basic  
 ,Ü,½,lf[f^ f}f[fWff,Á□□¬,μ,½ff[f^fx[fX,í Microsoft Access ,Á□AMicrosoft Access  
 ,Á□□¬,μ,½ff[f^fx[fX,í Visual Basic ,“,æ,Ñff[f^ f}f[fWff,Á□^—□,Á,«,Ü,·□B,±,lfwf<fv  
 ftf@fCf<,í□AVisual Basic ,Ü,½,í Jet ff[f^fx[fX (Visual Basic□AMicrosoft  
 Access□A,Ü,½,lf[f^ f}f[fWff,Á□□¬,μ,½ff[f^fx[fX) ,đ'í□Ù,É,μ,Ä,ç,Ü,·□B

V<Kff[f^fx[fX,ììì-  
SÖ~A€-Ú

ff[f^ f}f[fWff,Âìì-,μ,½ff[f^fx[fX,Í Microsoft Jet ff[f^fx[fX,Â ,èAMicrosoft Access  
Version 2.0 ,",æ,Ñ Visual Basic Version 4.0 ,ì-¼•û,Â•ÖW,·,é,±,Æ,ª,Â,«,Ü,·B

[ff[f^ f}f[fWff] fEfbf"fhfE,ì [ftf@fCf<] - [V<Kff[f^fx[fX,ììì-]

fRf}f"fh,ð'ì'ð,μ,Ü,·Bff[f^fx[fX

ftf@fCf<,ð•Ü'¶,·,éftfHf<f\_,ð'ì'ð,μ,Ü,·B[V<KftfHf<f\_,ðìì-,·,é,Æ,«,íA[V,μ,çftfHf<f\_,ììì-]

f{f^f",ð'ì'ð,μ,Ü,·BZÿ,Éftf@fCf<-¼,ð"ü-í,μ,Ü,·B,È, "Aftf@fCf<-¼,ìSg' £Žq,É,Í .MDB

,ðŽw'è,μ,Ü,·B,Ü,½ASù'¶,ì .MDB ftf@fCf<,ì-¼'O,ð"ü-í,μ,½,èA'ì'ð,·,é,±

,Æ,í,Â,«,Ü,¹,ñB[•Ü'¶] f{f^f",ð'ì'ð,μ,ÄAV,μ,çff[f^fx[fX-¼,ðY'è,μ,Ü,·B

V,μ,çff[f^fx[fX

ftf@fCf<,ðìì-,μ,½,çAff[f^,ðSi"[,·,éfe[fuf<AftfB[f<fhA, ",æ,ÑfCf"fffbfNfX,ð'Ç

%oA,μ,Ü,·B

ŠŮ~A€-Ú

V<Kfe[fuf<.ìì

**V<Kfe[fuf<,i]i-**  
**SÖ~A[€-Ú**

ff[f^fx[fX,lff[f^,íA,·,x,Äfe[fuf<,ÉŠi"[,³,ê,Ü,·BŠefe[fuf<,íA1  
 ,Á,Ü,½,í·;]”,lftfB[f<fh,íW,Ü,è,Æ,μ,Ä'è<³,ê,Ü,·BŠeftfB[f<fh,íAff[f^,ìCE^AFTfCYA,“,  
 æ,Ñ,»,í'¼,í'®<«,ðŽw'è,μ,ÄŠi"[,³,ê,éff[f^,íŽí—p,ðŽ,μ,Ü,·B

fe[fuf<]i-,Á,íAŠÖ~A,·,éff[f^,ðfOf<[fv%»»,μ,Ü,·B,½,Æ,í,íABIBLIO.MDB ftj“fyf<  
 ff[f^fx[fX,Á,íAŠe”ÁŽĐ,ÉSÖ,·,é,Ü,Æ,ñ,Ç,íî•ñ,ª Publishers fe[fuf<,ÉŠi"[,³,ê,Ä,ç  
 ,Ü,·B,Ü,½A1  
 ,Á,ío”ÁŽĐ,ª·;]”,ì'®<«,æ,Ñ·;]”,ì~ŽÒ,ì'•”,ðo”Á,·,é,½,βA'~ŽÒ,“,æ,Ñ'®<«,ÉSÖ,·,éî•ñ,í  
 A•É,lfe[fuf<,É,»,é,¼,éŠi"[,³,ê,Ä,ç,Ü,·Bff[f^fx[fX ftj@fCf<,lftfCY,ðβ-  
 ñ,·,é,½,β,ÉA Publisher Comments ,Æ,ç,¼'º,lfe[fuf<,ð•É,Éi-,μA,ç,-  
 ,Á,©,ìo”ÁŽĐ,íŠg'£î•ñ,ðŠi"[,μ,Ä,ç,Ü,·B

**V<Kfe[fuf<,i]i-**

1. fe[fuf<,ðV,μ,]i-,·,é,É,íA[fe[fuf</fNfGfŠ[] f\_fCfAfO f{fbfNfX,ì [V<K]i-]  
 ,ð'í'ð,μ,Ü,·B[V<Kfe[fuf<,í'Ç%Á] f\_fCfAfO f{fbfNfX,ª·\Ž,³,ê,Ü,·B
2. fe[fuf<-¼,ÆftfB[f<fh-¼,ð“ü—í,μA[ff[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,ðfŠXfg,É'Ç%Á,μ,Ü,·BfŠfXfg“à,ÄftfB[f<fh-  
 ¼,ð^U“®,·,é,É,íA[ä,Ö] ,“,æ,Ñ [%º,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,lf{f^f“,ðŽg—p,μ,Äfe[fuf<,ð^—,·,é,±,Æ,ª,Á,«,Ü,·B

**f{f^f“**

**“à—e**

[Š],.]	Žw'è,μ,½ff[f^fx[fX,íŠù'¶,lfe[fuf<,ðŠ],«Aff[f^,ð• Ž,μ,Ü,·B
[V<K]i-]	V,μ,fe[fuf<,ð]i-,μ,Ü,·B
[fffUfCf“]	Šù'¶,lfe[fuf<,ðŠ],«Afe[fuf<,ì\ç,ð•\Ž,Ü,½,íC³,μ,Ü,·B
[ííœ]	Šù'¶,lfe[fuf<,ðííœ,μ,Ü,·B
[fA^fbf` fe[fuf<]	V,μ,çfe[fuf<,lfA^fbf` A,Ü,½,íŠù'¶,lfe[fuf<,ìÄfA^fbf` ,ðs, ç,Ü,·B
[fŠfCE[fv]f#“]	fe[fuf<ŠÖ,lff[f^,íŠÖ~A•t,“,ð'è<,μ,Ü,·B

ftfB[f<fh-¼,ì\•¶,íAff[f^fx[fX fGf“fWf“,íŽí—p,É,æ,Á,Ä^Ü,È,è,Ü,·BJet  
 ff[f^fx[fX,Á,íAftfB[f<fh-¼,ì\•¶,íA'¼,lff[f^fx[fX flfufWfFfNfg,ì\  
 •¶,Æ“~,¶,Á,·Buff[f^fx[fX,ì-¼'º•t,“v,ðŽQºÆ,μ,Ä,-  
 ,¾,³,çBff[f^CE^,íAftfB[f<fh,ÉŠi"[,μ,Ä,ç,éî•ñ,íŽí—pA,½,Æ,í,íA”Žš,Ü,½,í•¶Žš—  
 ñ,ðÿ'è,μ,Ü,·B,Ü,Æ,ñ,Ç,íff[f^CE^,Á,íAftfCY,íŽ©“®“l,Éÿ'è,³,ê,Ü,·BfefLxfg  
 ftfB[f<fh,Á,íAftfB[f<fh,íA'á•K—vfofCf],ð“ü—  
 í,μ,Ü,·B,½,¾,μAfcfR[fh,íA'á',íA2000 fofCf,É§CEÀ,³,ê,Ä,ç,Ü,·B

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' [ ff[f^fx[fX,ÉftfB[f<fh,ð'Ç%Á,·,é,±,Æ,í,Á,«,Ü,·,ªAftfB[f<fh,ì-  
 ¼'º,ð•íXAA³A,Ü,½,íííœ,·,ééé¶,íAfe[fuf<'S'í,ðíííœ,μAŠeftfB[f<fh,ð,à,æ^è“xí  
 í-,·,é•K—v,ª, ,è,Ü,·B,μ,½,ª,Á,ÄAfe[fuf<,ðÿCEv,·,é,Æ,«,í^º,μ,Ä,,¾,³,çB

**ŠÖ~A€-Ú**

Šù'¶.ife[fuf<,đŠ].

ff[f^fx[fXŸŒv,ì•iX

fe[fuf<,ìíœ

**fe [fuf<, i] Y Ev**  
 SÖ A € - Ü

- K—v, ÈftfB [f<fh, ð, ·, x, Ä] —, μ, ½, ç [A [fe [fuf< / fNfGfS] ] f fCfAf fO f {fbfNfX, î è —  
 , ©, çfe [fuf<, ð' l' ð, μ [A [fffUfCf"] f {f^f", ð' l' ð, μ, Ä [fe [fuf< fGfffBf^] ] f fCfAf fO  
 f {fbfNfX, ðŠ}, «, Ü, · B

ŽŸ, l f {f^f", ðŽg — p, μ, Ä [Afe [fuf<, i] Y Ev, ð · i X, ·, é, ±, Æ, a, Å, «, Ü, · B

<b>f {f^f"</b>	<b>"à—e</b>
[ · Ò W ]	Šù' ¶, l f t f B [ f < f h, ð · Ò W, μ, Ü, · B
[ ' Ç % Á ]	V, μ, ç f t f B [ f < f h, ð ' Ç % Á, μ, Ü, · B
[ í œ ]	Šù' ¶, l f t f B [ f < f h, ð í œ, μ, Ü, · B
[ f C f " f f f b f N f X ]	f C f " f f f b f N f X, ð · Ò W [ A ' Ç % Á A, Ü, ½, í í œ, μ, Ü, · B
[ f L [ ]	Ž â f L [ , ·, æ, Ñ Š O · " f L [ , ð ' l' ð, μ, Ü, · B
[ · Å, ¶, é ]	[ f e [ f u f < f G f f f B f ^ ] f f C f A f O f { f b f N f X, ð · Å, ¶, Ü, · B

- [ f e f l f X f g f G f f f B f ^ ] f f C f A f O f { f b f N f X, î [ f C f " f f f b f N f X ] f { f ^ f " , ð ' l' ð, μ, Ä [ A [ f C f " f f f b f N f X ]  
 f f C f A f O f { f b f N f X, ð Š }, «, Ü, · B [ ' Ç % Á ] f { f ^ f " , ð ' l' ð, μ, Ä [ A f e [ f u f <, É · K—  
 v, È f C f " f f f b f N f X, ð —, μ, Ü, · B

' È í A, ±, l f C f " f f f b f N f X, ð Žg —  
 p, μ, Ä [ A f p t f H [ f ] f " f X, ð È ü ä, ³, ¹, ½, è [ A f e [ f u f < " à, l ò d · i, μ, ½ f C e f R [ f h, ð í œ, μ, Ü, · B

f t f B [ f < f h, î è ¶, Æ " — l, É [ A f C f " f f f b f N f X - ¼, l \ · ¶, í [ A f f [ f ^ f x [ f X f G f " f W f " , l Ž í—  
 p, É, æ, Å, Å ^ Ü, È, è, Ü, · B j e t f f [ f ^ f x [ f X, Å, í [ A f C f " f f f b f N f X - ¼, l \ · ¶, í [ A ' ¼, l f f [ f ^ f x [ f X  
 f l f u f W f f N f g, l \ · ¶, Æ " , ¶, Å, · B u f f [ f ^ f x [ f X f l f u f W f f N f g, l - ¼ ' O · t, · v, ð Ž Q [ Æ, μ, Å, -  
 ¾, ³, ç B

- î è —, ©, ç 1 , Å, Ü, ½, í · i ¶ " , l f t f B [ f < f h - ¼, ð ' l' ð, μ [ A [ ' Ç % Á ] f { f ^ f " , ð ' l' ð, μ, Ä [ A, ±  
 , è, ç, l f t f B [ f < f h - ¼, ð [ f C f " f f f b f N f X " à, l f t f B [ f < f h ] f { f b f N f X, É ' Ç % Á, μ, Ü, · B  
 , ±, è, ç, l f t f B [ f < f h, î " à — e, É, æ, è [ A, Ç, l, æ, x, É f e [ f u f <, ð · Å, x ' Ö, l, é, © [ A, Ü, ½, í, Ç, l, æ, x  
 , È C % É, ð · Ö, ·, ©, ð Y ' è, μ, Ü, · B f C f " f f f b f N f X, ð —, ·, é, Æ, « [ A f t f B [ f < f h ] " , É [ Ç E Á, í, , è, Ü, ¹, ñ  
 , æ [ A f t f B [ f < f h - ¼ ' S ' l, l ' · ³, í 254 · ¶ Ž Š ^ È " à, É [ Ç E Á, ³, è, Å, ç  
 , Ü, · B, ³, ç, É [ A ^ è " , l f t f B [ f < f h, l f C f " f f f b f N f X, Æ, μ, Ä Ž w ' è, Å, «, Ü, ¹, ñ B, ½, Æ, l, í [ A f f, C E ^ , l f t f B [ f < f h, à O L E f l f u f W f f N f g C E ^ , l f t f B [ f < f h, l Ž w ' è, Å, «, Ü, ¹, ñ B

- Visual Basic , Å [ A, ±, l f C f " f f f b f N f X, ð Š, É f e [ f u f < " à, l f C e f R [ f h, l ò d · i, ð " ð, ·, é, É, í [ A [ ' l — v < [ ]  
 , ·, æ, Ñ [ C E Á — l f C f " f f f b f N f X ] f ^ f f b f N f { f b f N f X, ð f l f " , É, μ, Ü, · B Visual Basic , Å, ±  
 , l f C f " f f f b f N f X, ð Ž â f C f " f f f b f N f X, Æ, μ, Ä Y ' è, ·, é, É, í [ A [ Ž â f L [ ] f ^ f f b f N f { f b f N f X, ð f l f " , É, μ, Ü, · B

- [ ' Ç % Á - [ ] , Ü, ½, í [ ' Ç % Á - [ ~ [ ] ] f { f ^ f " , ð ' l' ð, μ, Ä [ A, ±  
 , l f C f " f f f b f N f X, ð Š, É f e [ f u f <, l · Å, x ' Ö, l · û - @, ð Ž w ' è, μ, Ü, · B

- K—v, È f C f " f f f b f N f X, ð, ·, x, Ä —, μ, ½, ç [ A [ O K ] f { f ^ f " , ð ' l' ð, μ, Ü, · B

f f [ f ^ f x [ f X [ \ ç, ð ] —, μ, ½ C E ä [ A f f [ f ^ f x [ f X, É f f [ f ^, ð " ü — í, ·, é, ½, ß, l Visual Basic  
 f A f v f S f P [ f V f f " , ð —, μ, ½, è [ A f f [ f ^ f ] f l [ f W f f, ð Žg —  
 p, μ, Ä f e [ f u f <, ð Š, « ' ¼ [ Ü · Ò W, μ, ½, è, Å, «, Ü, · B u Šù ' ¶, l f e [ f u f <, ð Š, -  
 v, ·, æ, Ñ u f f [ f ^ f x [ f X Y Ev, l · i X v, ð Ž Q [ Æ, μ, Å, ¾, ³, ç B

**ŠÖ~A€-Ú**

Šù'¶.ife[fuf<,đŠ].

ff[f^fx[fXŸŒv,ì•iX

fe[fuf<,ìíœ



**Šù‘ŕ, ìŕe [fuf<, ðŠ],**  
ŠÖ~A [€-Ú]

Šù‘ŕ, ìŕe [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^ê—, ©, çfe [fuf<-  
¼, ð‘l‘ð, μ [A [Š], ] , ð‘l‘ð, μ, Ü, · [B

ŠŮ~A€-Ú

V<Kfe[fuf<.ìì

**fe [fuf<, íœ**  
SÖ~A€-Ú

Šù'¶, ìfe [fuf<, ðíœ, , é, É, íA[ftf@fCf<] - [ff [f^fx [fX, ðŠJ, ]  
fRf} f"fh, ð'I'ð, µAftf@fCf<, ðŽw'è, µ, Ä [ŠJ, ] f{f^f", ð'I'ð, µ, Ü, ·B[fe [fuf</fNfGfŠ [ ] f\_fCfAf [fO  
f{fbfNfX, î^è—, ©, çfe [fuf<-¼, ð'I'ð, µA [íœ] f{f^f", ð'I'ð, µ, Ü, ·BfAf^fbf`  
fe [fuf<, ðíœ, µ, Ä, àE³, ìfe [fuf<, íœ, ³, ê, , AfAf^fbf` , ìY'è, ¾, , íœ, ³, ê, Ü, ·B

ŠŮ~A€-Ú

V<Kfe[fuf<.ìì

ff[]f^fx[]fX[]YCEv,i•i[]X

[fe[]fuf</fNfGfŠ[][] f\_fCfAf[]fO f{fbfNfX,i^ê—,©,çŠù'¶,ife[]fuf<-¼,đ'l'đ,μ[]A[fffUfCf"]  
f{f^f",đ'l'đ,μ,Ä[]A[fe[]fuf< fGfffBf^] f\_fCfAf[]fO f{fbfNfX,đŠ),«,Ü,·[]B,±,lf\_fCfAf[]fO  
f{fbfNfX,Å[]AftfB[]f<fh,i•Ò[]W[]A'Ç%°Å[]A,"æ,N[]í[]œ,đ,μ,½,è[]AfL[][,đŽw'è,Å,«,Ü,·[]B

**□V<KfCf“ffbfNfX,ìò□¬**

1. [fe□[fuf</fNfGfŠ□[ ] f\_fCfAf□fO f{fbfNfX,ÀŠù'¶,ìfe□[fuf<-¼,ð'ì'ð,μ□A[fffuFcf“] f{f^f“,ð'ì'ð,μ,Û,·□B[fe□[fuf< fGffBf^] f\_fCfAf□fO f{fbfNfX,ª•\Žì,³,è,Û,·□B
2. [fCf“ffbfNfX] f{f^f“,ð'ì'ð,μ□A[‘Ç%oÁ] f{f^f“,ð'ì'ð,μ,Û,·□BfCf“ffbfNfX-¼,ð“ü—Í,μ□A•K— v,É□€—Û,ð□Ý'è,μ,Û,·□B[fe□[fuf<'t,ìftfB□[f<fh] f{fbfNfX, ©,ç 1 ,Á,Û,½,Í•;□” ,ìftfB□[f<fh-¼,ð'ì'ð,μ□A[‘Ç%oÁ] f{f^f“,ð'ì'ð,μ,Û,·□B  
‘ì'ð,μ,½ftfB□[f<fh-¼,Í□A[fCf“ffbfNfX't,ìftfB□[f<fh] f{fbfNfX,É^Ú“ ®,μ,Û,·□B,± ,è,ç,ìftfB□[f<fh,ì“à—e,É,æ,è□A,Ç,ì,æ,π,Éfe□[fuf<,ð•Á,x'Ö,ì,é,©□A,Û,½,Í,Ç,ì,æ,π ,ÉÇ<%oÉ, ©, ð□Ý'è,μ,Û,·□BfCf“ffbfNfX,ðò□¬,·,é,Æ,«□AftfB□[f<fh□” ,É□\$CEÁ,Í, ,è,Û,¹,ñ,ª□Aft fB□[f<fh-¼'S'ì,ì'·,³,Í 254 •¶Žš^È“à,É□\$CEÁ,³,è,Ä,ç ,Û,·□B,³,ç,É□A^è•”,ìftfB□[f<fh,ìfCf“ffbfNfX,Æ,μ,ÄŽw'è,Á,«,Û,¹,ñ□B,½,Æ,ì,î□AftfB□,CE^,ìftfB□ [f<fh,â OLE flfufWfFfNfgCE^,ìftfB□[f<fh,ÍŽw'è,Á,«,Û,¹,ñ□Bfe□[fuf<,É•K— v,ÉfCf“ffbfNfX,ð,·,×,Äò□¬,μ,Û,·□B  
ftfB□[f<fh,ì□ê□±,Æ“—ì,É□Afcf“ffbfNfX-¼,ì□\•¶,ìff□[f^fx□[fX fGf“fWf“,ìŽì— b,É,æ,Á,Ä^Û,É,è,Û,·□BMicrosoft Jet fff□[f^fx□[fX,Á,ì□Afcf“ffbfNfX-¼,ì□\ •¶,ì□A'¼,ìff□[f^fx□[fX flfufWfFfNfg,ì□\•¶,Æ“—,¶,Á,·□B□uff□[f^fx□[fX flfufWfFfNfg,ì-¼'Ö•t, □v,ðŽQ□Æ,μ,Ä,³/₄,³,ç□B
3. •K—v,ÉfCf“ffbfNfX,ð,·,×,Äò□¬,μ,½,ç□A[OK] f{f^f“,ð'ì'ð,μ,Û,·□B

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'□ 'É□í□Afcf“ffbfNfX,ðŽg—  
p,μ,Ä□AfpftfH□[f}f“fX,ðCEü□ă,³,½,è□Afe□[fuf<“à,ì□d•;fCEfR□[fh,ð□í□œ,μ,Û,·□B

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## ftf@fCf< f fjjf... [ fRf}f“fh

[ftf@fCf<] f fjjf... [.,Å,íAŽŸ,ìfRf}f“fh,ð—~—p,Å,«,Ü,·B

### **fRf}f“fh**

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[V<Kff[f^fx[fX,ì]ò¬]

[ff[f^fx[fX,ðŠ],]

[ff[f^fx[fX,ì]Å“K%»]

[ff[f^fx[fX,ì]•İŠ·]

[ff[f^fx[fX,ì]ˆÃ+%»]

[ff[f^fx[fX,ì]‰ð“Ç]

[ff[f^fx[fX,ì]C•œ]

[ff[f^ f}fì[fWff,ì]!—¹]

## fGf%oo[]'Ç%ooÁfCf“ffbfNfX

fCf“ffbfNfX,đ[]-.,é,Æ,«[]AftfB[][f<fh]”,É[]\$CEÀ,Í,è,Ü,<sup>1</sup>,ñ,²[]AftfB[][f<fh-¼'S'ì,ì',<sup>3</sup>,Í 254

•¶Žš^È“à,É[]\$CEÀ,<sup>3</sup>,ê,Ä,ç

,Ü,·[]B,<sup>3</sup>,ç,É[]A^ê•”,lftfB[][f<fh,lfCf“ffbfNfX,Æ,μ,Ăžw'è,Å,«,Ü,<sup>1</sup>,ñ[]B,½,Æ,!,î[]Af[]f,CE^,lftfB[][f<fh,Ü,½,Í OLE flfufWfFfNfg,lftfB[][f<fh,Ížw'è,Å,«,Ü,<sup>1</sup>,ñ[]B



## fe[]fuf< ff[]f^,i^—

ff[]f^,ð^—,·,é,É,Í,A,Ü, fe[]fuf<,ðŠJ,«AŠJ,ç,½fe[]fuf<,É•K—v,È^—,ðs,ç,Ü,·B

- fe[]fuf<,i“à—  
e,ð•iX,·,é,É,ÍAŠeftfB[]f<fh,ð'í'ð,μ,Ü,·B·iXCEãA•Ê,ifCFR[]fh,É^Ú“®,·,é,ÆA•iX“à—  
e,³ff[]f^fx[]fX,É•Ú'¶,³,ê,Ü,·B
- V,μ,çCFR[]fh,ðfe[]fuf<,iÅCEã,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[OK] f{f^f“,ð'í'ð,μ,Ä•iX“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  
%ñ•œ,Ä,«,Ü,<sup>1</sup>,ñB
- “Á'è,ifCFR[]fh,ðCE©,Ä,·,é,É,íA[CEÿ[]ð] f{f^f“,ð'í'ð,μ,Ü,·BCEÿ[]ð,·,éftfB[]f<fhA%  
%ŽŽŽqA,“,æ,Ñ'í,ð'í'ð,μ,Ü,·B,±,ìŽ®,ì[]•¶,íAVisual Basic ,iflf“f%ofCf“ fwf<fv,ÄŽ!,<sup>3</sup>,ê,é Find  
f[]fbfh,ì[]•¶,Æ“·,¶,Ä,·B'É[]A,±,ì[]•¶,í'O,É,íASQL (Structured Query Language) ,ì WHERE  
<ã,ª“ü,è,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,¯

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□A•¶Žš□A□"Žš□AfXfy[]fX□A"ÁŽê•¶Žš,ð'g,Ý□#,í,¹,Ä□Ý'è,Å,«,Ü,·□B,½,¾,μ□A"ÁŽê•¶Žš  
,ì't,ìfsfŠfifh (.)□AS'Q•,, (!)□A, ¨,æ,ŇŠp,©,Á,± ([ ]) ,ÍŽg—  
p,Å,«,Ü,¹,ň□B,Ü,½□A□æ"ª,ÉfXfy[]fX,ð"ü.ê.½,è□A□\$Āä•¶Žš (ASCII fR[]fh,ª 0 ,©,ç 32  
,Ü,Å,ì•¶Žš) ,ÍŽg—p,Å,«,Ü,¹,ň□B

**fe[]fuf<ŠÔ,lfŠf[]fVf#f“**

[fe[]fuf</fNfGfŠ[]] f\_fCfAf[]fO f{fbfNfX,îê—,©,çfe[]fuf<-¼,đ'îđ,μ[]AlfŠf[]fVf#f“] f{f^f“,đ'îđ,μ,Û,·[]BŽŸ,É [fŠf[]fVf#f“] f\_fCfAf[]fO f{fbfNfX,â\Ž,³,ê,Û,·[]B,±,ì[fŠf[]fVf#f“] f\_fCfAf[]fO f{fbfNfX,Å[]Aff[]f^fx[]fX,ife[]fuf<ŠÔ,lfŠf[]fVf#f“,đ'è<,·,é,±,Æ,â,À,«,Û,·[]BfNfGfŠ[][,đŽÅ[]s,μ,½,è[]A·;[]”,ife[]fuf<,đŠî,ÉftfH[]f€,âf[]f[]fg,đ^— []·,é,Æ[]Aff[]f^ f}f[]fWff,í[]A,±,ê,ç,lfŠf[]fVf#f“,đŽg— p,μ,Å[]ASÖ~A,·,éff[]f^,đCEÿ[]đ,μ,Û,·[]B

**[Žâfe[]fuf<]**

ff[]f^fx[]fX,ife[]fuf<,đ^ê—·\ Ž!,μ,Û,·[]B·É,ife[]fuf<,ÆSÖ~A,Ä,·,éžâfL[] [ftfB[]f<fh,đŠÛ,pfe[]fuf<,đ'îđ,μ,Û,·[]B

**[ŽâfL[] [ftfB[]f<fh]**

'îđ,μ,½žâfe[]fuf<,ìžâfL[] [ftfB[]f<fh,đ·Ž!,μ,Û,·[]B

**[Ží—p]**

fŠf[]fVf#f“,ì·û-@,đ[]A[^êîê] ,Û,½,í [^êî½] ,ì,ç,·,é,©,©,ç'îđ,μ,Û,·[]B

**f[]fVf#f“ []à-¾**

[^êîê] fe[]fuf<ŠÔ,îêîêfŠf[]fVf#f“,đŠm—š,μ,Û,·[]B

[^êî½] fe[]fuf<ŠÔ,îêî½fŠf[]fVf#f“,đŠm—š,μ,Û,·[]B

**[fŠf[]fVf#f“ fe[]fuf<]**

ff[]f^fx[]fX,ì,·,x,Ä,ife[]fuf<,đ^ê—·\Ž!,μ,Û,·[]Bžâfe[]fuf<,ÆSÖ~A·t,·,éfe[]fuf<,đ'îđ,μ,Û,·[]B

**[^ê'v,·,éftfB[]f<fh]**

ŠÖ~Afe[]fuf<,ìftfB[]f<fh,đ^ê—·\ Ž!,μ,Û,·[]Bžâfe[]fuf<,ìžâfL[] [ftfB[]f<fh,Æ^ê'v,·,éftfB[]f<fh,đ'îđ,μ,Û,·[]B

**[ŽQ[]Æ[]@[]#[]<]**

ŽQ[]Æ[]@[]#[]<,đ<%»»,·,é,½,ß,É,í[]A,±,lf^ffbfN f{fbfNfX,đf[]f“,É,μ,Û,·[]Bff[]f^ f}f[]fWff,É,±,è,ç,ì<K¥,đ<%»»,³,¹,È,ç[]é[]#,í[]A,±,lf^ffbfN f{fbfNfX,đf[]f,É,μ,Û,·[]B

**[^Ç%oÁ] f{f^f“**

Žw'è,μ,½“à—e,É[],.Á,Ä[]AfŠf[]fVf#f“,đ[][]¬,μ,Û,·[]B

**[[]í[]œ] f{f^f“**

fŠf[]fVf#f“,đ[]í[]œ,μ,Û,·[]B

**[CEó·â]**

ŠÖ~Afe[]fuf<,ì't,©,çžâfL[] [ftfB[]f<fh,Æ“·,¶-¼'O,đŽ[],.ÂftfB[]f<fh,đ'T,μ,Û,·[]B

**[·Â,¶,é] f{f^f“**

f\_fCfAf[]fO f{fbfNfX,đ·Â,¶,Û,·[]B

## fe[fuf<]fAf^fbf`

1. [fe[fuf</fNfGfŠ[]] f\_cfAf[]fO f{fbfNfX,ì [fAf^fbf` fe[fuf<] f{f^f“,ð'í'ð,μ,Û,·[]B [fAf^fbf` fe[fuf<] f\_cfAf[]fO f{fbfNfX,ª•\Žì,³,è,Û,·[]B
2. [V<K] f{f^f“,ð'í'ð,μAftfB[]f<fh,Éî•ñ,ð“ü—í,μA[[]ÄfAf^fbf` ] f{f^f“ ,ð'í'ð,μ,Û,·[]B ,±,ìfRf}f“fh,í[]A•É,ìff[]f^fx[]fX fAfvfŠP[]fVfþf“,ìfe[fuf<,Æ,ìfŠf“fN,ð[]¬,μ[]A,»,ìfe[fuf<,ìff[]f^,ì\ Žì,“ ,æ,Ñ•Ö[]W,ª,Ä,« ,Û,·[]BfAf^fbf` fe[fuf<,í[]AVisual Basic ,¾,“ ,Ä,È,- Æ³,ìfAfvfŠP[]fVfþf“,Ä,àÆp'±,μ,ÄŽg—p,Ä,« ,Û,·[]B¾,ì Microsoft Jet ff[]f^fx[]fX,ìfe[fuf<,àfAf^fbf` , ,é,± ,Æ,ª,Ä,« ,Û,·[]B•É,ìff[]f^fx[]fX,ìfe[fuf<,ðfAf^fbf` , ,é,± ,Æ,È,æ,è[]A,»,ìff[]f^fx[]fX,ðŠ,©,È,,Ä,àfe[fuf<,ðŽg—p, ,é,±,Æ,ª,Ä,« ,Û,·[]B

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'[] Paradox[]ABtrieve[]A,Û,½,í SQL ff[]f^fx[]fX,ìfe[fuf<,ðfAf^fbf` , ,éèè[]A¾,ìfAfvfŠP[]fVfþf“,ÄÝ'è,³,è,½fpfXf[]f<fh,ðŽw'è,μ, È,“ ,é,í,È,ç,È,ç,Æ,« ,ª ,è,Û,·[]Bfe[fuf<,ðfAf^fbf` ,μ[]AfpfXf[]f<fh,ðŽw'è, ,é,Æ[]Aff[]f^ f}f[]fWff,í[]AÆä,Ä,±,ìfe[fuf<,ðŠ, ,±,Æ,ª,Ä,« ,é,æ,ª,É[]A,± ,ìfpfXf[]f<fh,ðff[]f^fx[]fX,ÉŠì“[ ,μ,Û,·[]BSQL ff[]f^fx[]fX,Ä,í[]Afìfvfþf“,Æ,È,Ä,Ä,ç ,Û,·[]B,Û,½[]AfpfXf[]f<fh,ð•ÛÆì, ,é,½,ß,É[]AfpfXf[]f<fh,ðŽ,ÄfAf^fbf` fe[fuf<,ðŠÛ,ìff[]f^fx[]fX,ð^Ä[]+%», ,éèè[]±,à ,è,Û,·[]B

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Žÿ,ìff[]f^fx[]fX fAfvfŠP[]fVfþf“,ìfe[fuf<,ðfAf^fbf` , ,é,±,Æ,ª,Ä,« ,Û,·[]B

- Microsoft Access (Š,ç,Ä,ç,éff[]f^fx[]fX^ÈŠO,ìff[]f^fx[]fX)
  - Paradox (version 3.x[]A4.x ,ì .DB ftf@fCf<)
  - FoxPro (version 2.0[]A2.5 ,ì .DBF ftf@fCf<)
  - dBASE III[]AdBASE IV (.DBF ftf@fCf<)
  - Btrieve (ff[]f^'è< ftf@fCf< FILE.DDF[]AFIELD.DDF •t,«)
  - Microsoft SQL Server[]ASybase SQL Server[]AORACLE Server (,ç, ,é,©,ì SQL ff[]f^fx[]fX,ð'í'ð)
  - ODBC
- SQL ff[]f^fx[]fX,ð^—, ,éèè[]A[SQL Server f[]fOfìf“] f\_cfAf[]fO f{fbfNfX,ª•\Žì,³,è,Û,·[]BŠe ODBC fhf%ofCfo,ìf\_cfAf[]fO f{fbfNfX,ìfvfþf“,È,Ä,ç,Ä,í[]AODBC fhf %ofCfo,ÉŠÖ, ,éî•ñ,ðŽQ[]Æ,μ,Ä,¾,³,ç[]B
- ŠO•“fe[fuf<,ðfAf^fbf` ,μ,½,ç[]A[fe[fuf< fGfffBf^] f\_cfAf[]fO f{fbfNfX,É[]A,»,ìfe[fuf<,ìftfB[]f<fh fvf[]fpfefB,ðY'è,μ,Û,·[]B
- fAf^fbf` fe[fuf<,ì\ç,í•ì[]X,Ä,« ,Û,¹,ñ,ª[]AftfB[]f<fh fvf[]fpfefB,íY'è, ,é,±,Æ,ª,Ä,« ,Û,·[]B

'½'í'½fšfCE[fVf#f" ,ì'è<

2 ,Â, ìfe[fuf<šÔ, ì'½'í'½fšfCE[fVf#f" ,Â, íA^ê•ú, ìfe[fuf<, ì 1  
,Â, ìfCEfR[fh, ð'¼•ú, ìfe[fuf<, ì•i" , ìfCEfR[fh, ÉŠÓ~A•t, ,é, ±, Æ, ð, Â, «, Û, ·B

'½'í'½fšfCE[fVf#f" ,ð'è< , ,é, É, íA, ±, ì 2 ,Â, ìfe[fuf<, ðCE<# , ,é, ½, ß, ì 3  
,Â, ß, ìfe[fuf<, ði~ , μ, Û, ·B

1. '½'í'½fšfCE[fVf#f" ,ð'è< , ,éfe[fuf<, ði~ , μ, Û, ·B

2. 3 ,Â, ß, ìfe[fuf< (CE<#—p, ìfe[fuf<), ði~ , μA, ±, ìfe[fuf<, É'¼, ì 2  
,Â, ìfe[fuf<, ìžâfL[ ftfB[f<fh, ðY'è, μ, Û, ·B, ±  
, ìfe[fuf<, Â, íAžâfL[ ftfB[f<fh, íAŠO•"fL[ , Æ, μ, Ä@ "\, μ, Û, ·B

3. 3 ,Â, ß, ìfe[fuf<, Â, íAžâfL[ , ðA'¼, ì 2 ,Â, ìfe[fuf<, ìžâfL[ ftfB[f<fh, ð, , x, ÄŠÛ, p, æ, x  
, ÉY'è, μ, Û, ·B

4. 2, Â, ìžâfe[fuf<, Æ 3 ,Â, ß, ìfe[fuf<, Æ, ìšÔ, ÉA^ê'½fšfCE[fVf#f" ,ð, » , è, ¼, è'è< , μ, Û, ·B

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' 3 ,Â, ß, ìfe[fuf<, É, íA'Éí, ìfe[fuf<~ , Æ" —I, ÉAžâfL[ ftfB[f<fh^ÈŠO, ìftfB[f<fh, ð'Ç  
%oA, ,é, ±, Æ, ð, Â, «, Û, ·B

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## SQL fXfe[]fgf[]f“fg

ff[]f^fx[]fX,ð-â,ç[]#,í,<sup>1</sup>,é,É,Í[]A,Ü, ,ff[]f^fx[]fX,ð'í'ð,μ[]AŠ],«,Ü,·[]B[SQL fXfe[]fgf[]f“fg]  
f\_fCfAf[]fO f{fbfNfX,Å[]AfNfGfŠ[][,ð“ü—í,μ[]A[ŽÀ[]s]  
f{f^f“,ð'í'ð,μ,Ü,·[]BfNfGfŠ[][,ð•Ü'¶],·,é,É,Í[]A[•Ü'¶] f{f^f“,ð'í'ð,μ[]AŽŸ,É QueryDef  
flfuWfFfNfg<sup>-1/4</sup>,ð“ü—í,μ[]A[OK] f{f^f“,ð'í'ð,μ,Ü,·[]B[SQL fXfe[]fgf[]f“fg] f\_fCfAf[]fO  
f{fbfNfX,ì[]Y'è,ð%øð[]œ,·,é,É,Í[]A[fNfŠfA] f{f^f“,ð'í'ð,μ,Ü,·[]B

