

]LIST

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0 CLEAR : PRINT CHR$ (4)"NOMON CIO": TEXT :TS% = 0: PRINT CHR$ (4);"PR#"VS%:
RE = PEEK (40160) + 256 * PEEK (40161): PRINT CHR$ (4)"MAXFILES 1"
1 HOME : PRINT "THIS SHORT PROGRAM IS A SAMPLE OF          BENEFITS DELIVERED BY
PEERSOFT IN TERM OF PERFORMANCE.": PRINT "IT USES A THUNDERCLOCK CARD IN YOUR
APPLE IF PRESENT, TO DETERMINE THE SLOT OR TO DISABLE SUCH FEATURE,"
2 PRINT "JUST EDIT LINE 58": LIST 58,59: PRINT "PRESS ANY KEY TO CONTINUE";: G
ET S$
5 HOME : PRINT "DEF(INT!SNG!STR) AND (+!-!*!/) = FEATURES";
9 LIST 10,21
10 DEFINT A-Z: DEFSTR S
20 S = "BONJOUR":S += " HELLO"
21 PRINT S;
29 LIST 30,31
30 A% = 5:A += 2
31 PRINT A,A%;
39 LIST 40,41
40 A *= 2
41 PRINT A%;
49 LIST 50,51
50 B! = A:A /= 4:B! /= 4
51 PRINT A,B!
55 PRINT "PRESS ANY KEY TO CONTINUE": GET S
57 HOME : PRINT "@ PSEUDO VAR W. NEW VAR. SETTING SYNTAX": PRINT "AND ALTERNAT
E ARRAY ELM. SPEC."
58 TS% = - 1: ON TS% = 0 GOTO 59: PRINT CHR$ (4)"BLOAD TCPRECON": CALL 769:TS
% = PEEK (768): REM SET TS% TO 0 IF NO THUNDERCLOCK CARD
59 ON TS% > 0 GOTO 60:TS% = 0: PRINT CHR$ (4)"BLOAD SMTRECON": CALL 576: ON
PEEK (768) < > 0 GOTO 60:TS% = - 2
60 DEF FN AR!(S!) = INT (S! * 100) * .01: LIST 61,65
61 NE = 59: DIM A!(NE,NE): DEFSNG S,I,J:OP% = 0: GOSUB 999: VTAB 20: FOR I = 0
TO NE: FOR J = 0 TO NE:A!(I,J) = RND (1): NEXT J,I:V$ = "INIT": GOSUB 999
63 VTAB 21:SS = 0: FOR I = 0 TO NE: FOR J = 0 TO NE:SS = SS + A!(I,J) * A!(I,J
): NEXT : NEXT :V$ = "THE CLASSIC WAY " + STR$ ( FN AR!(SS)): GOSUB 999
65 CALL RE!,0,I,SS: VTAB 22:SS = 0: FOR I = 0 TO (NE + 1) * @ - 1:SS += A!(I
) * @ : NEXT :V$ = "THE PEERSOFT WAY " + STR$ ( FN AR!(SS)): GOSUB 999
66 PRINT "PRESS ANY KEY TO CONTINUE";: GET S$
67 REM REMOVE A! ARRAY FROM MEMORY
68 REM W/O ANY ML ROUTINE
69 A1! = 0:A1! = PEEK (109) + 256 * PEEK (110) - 18009: POKE 110, INT (A1! /
256): POKE 109,A1! - 256 * PEEK (110)
70 HOME : PRINT "INTEGER VAR. INDEXES IN FOR/NEXT LOOPS"
71 LIST 72,73:OP% = 0: GOSUB 999
72 DEFSNG I: FOR I = - 32768 TO 32766: NEXT :V$ = "CLASSIC LOOPS": GOSUB 999
73 DEFINT I: FOR I = - 32768 TO 32766: NEXT :V$ = "PEERSOFT LOOPS": GOSUB 999
75 PRINT "PRESS ANY KEY TO CONTINUE": GET S$
80 PRINT : PRINT CHR$ (4)"PR#3": HOME : POKE 40157,3: REM # OF APPLESOFT INST
R. BETWEEN 2 CS
81 PRINT "CONCURRENT SUBROUTINES WITHIN PEERSOFT": PRINT "SOURCE LISTING"
82 LIST 83,86: LIST 1100,2100: PRINT "PRESS ANY KEY TO CONTINUE";: GET S$: PRI
NT : PRINT CHR$ (4)"PR#0": HOME : PRINT "CONCURRENT SUBROUTINES WITHIN PEERSOFT
": PRINT "EXECUTION PHASE"
83 DEFINT I,J: DIM I2(127),I1(127),I0(127): REM ARRAYS FOR CONTEXT STORAGE
84 CALL RE!,0,IT,J2,J1,J0: REM PHYSICAL REORG OF SIMPLE VARIABLES
85 CALL RE!,4,IT,I0,0,0,0,1100,I1,0,0,0,1200,I2,0,0,0,1300: REM ACTIVATE MT KE
RNEL
86 PRINT "MAIN PROGRAM FLOW REINSTATED": PRINT "PRESS ANY KEY TO CONTINUE";: G
ET S$: PRINT CHR$ (21): PRINT CHR$ (4)"PR#"VS%
90 TEXT : HOME : PRINT "PRECOMPUTED GOTO/GOSUB"
91 LIST 92,93: PRINT "..MANY LINES IN BETWEEN..": LIST 60000:OP% = 0: GOSUB 99
9
92 CALL RE!,8,0: FOR I = 0 TO 9999: GOSUB 60000: NEXT :V$ = "CLASSIC GOSUBS":
GOSUB 999
93 CALL RE!,8,128: FOR I = 0 TO 9999: GOSUB 60000: NEXT :V$ = "PRECOMPUTED GOS
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UBS": GOSUB 999
94 PRINT "PRESS ANY KEY TO PROCEED";: GET A$
95 ON PEEK (40142) > 0 AND PEEK (40142) < 8 GOTO 101: PRINT : PRINT "NO MOUS
E HARDWARE FOUND: SKIPPING": PRINT "PRESS ANY KEY TO CONTINUE";: GET A$: GOTO 20
0
100 REM MOUSE IN TRANSPARENT MODE WITH MOUSE FUNCTIONS
101 PRINT : PRINT CHR$ (4)"PR#3": PRINT "MOUSE IN TRANSPARENT MODE WITH MOUSE
FUNCTIONS": LIST 103,107: LIST 3100,3130: PRINT "PRESS ANY KEY TO PROCEED";: GE
T A$: PRINT CHR$ (17)
102 HOME
103 DEFINT S-Y:X = 0:Y = 0:S = 0: MOUSE ON ,1: CALL RE!,10,5,1,40,2,23:XO = 0
:YO = 0:L$ = CHR$ (15) + CHR$ (27) + "B" + CHR$ (24) + CHR$ (14)
104 X = 1:Y = 2: CALL RE!,10,4,X,Y: GOSUB 3100: GOSUB 3110:XO = X:YO = Y: CALL
RE!,11,24,1,"MOVE THE MOUSE, PRESS BUTTON TO PROCEED";
105 FOR T = 0 TO 1 STEP 0:S = MOUSE (2): ON S < 32 GOTO 107:X = MOUSE (0):Y
= MOUSE (1): GOSUB 3100: GOSUB 3120
106 GOSUB 3110:XO = X:YO = Y: ON S < 128 GOTO 107:T = 1
107 NEXT : MOUSE OFF : GOSUB 3120
108 VTAB 24: HTAB 1: CALL - 868: VTAB 2: HTAB 1: PRINT CHR$ (21);
109 ON PEEK (40173) > 64 GOTO 110: PRINT "NO SUITABLE CONFIG FOR INTERRUPTS":
GOTO 200
110 PRINT : PRINT CHR$ (4)"PR#3": PRINT "MOUSE IN INTERRUPT MODE ALONG WITH T
IMER": LIST 111,119: LIST 2800,3100: PRINT "PRESS ANY KEY TO PROCEED";: GET A$:
PRINT CHR$ (17): HOME
111 MOUSE ON ,1: CALL RE!,10,5,1,40,2,21:X = 1:Y = 2: CALL RE!,10,4,X,Y: GOSU
B 3100: GOSUB 3110:XO = X:YO = Y: CALL RE!,11,24,1,"MOVE THE MOUSE, PRESS BUTTON
TO EXIT";:S = 0
112 ON MOUSE GOSUB 2800: ON TIMER GOSUB 2900: MOUSE ON ,7: TIMER ON ,60
113 FOR T = 0 TO 1 STEP 0: CALL RE!,11,23,1,"FOREGROUND COUNTER VALUE IS ";CP!
;:CP! += 1:T = (S > 127): CALL - 868: NEXT
114 MOUSE OFF : TIMER OFF : GOSUB 3120: PRINT CHR$ (21)
200 PRINT CHR$ (4)"PR#3": PRINT "USER MACHINE LANGUAGE ROUTINES": PRINT "UP T
O 11 ROUTINES, EACH WITH UP TO 2 ARGS": LIST 201,209: LIST 51000,51008: PRINT "P
RESS ANY KEY TO CONTINUE";: GET S$: PRINT CHR$ (21)
201 GOSUB 800: CLEAR : GOSUB 801: HOME : PRINT "SAMPLE RUN": PRINT : DEFSNG U,
R:RE = PEEK (40160) + 256 * PEEK (40161): RESTORE : DIM VX!(2)
202 PRINT CHR$ (4)"BRUN TCUSRFNDEMO":UB = PEEK (115) + 256 * PEEK (116)
205 OF = 0: FOR F = 0 TO 1 STEP 0: READ LI$:F = (LI$ = "FIN"): ON F GOTO 209: R
EAD NA,TY$
206 DEFUSR = IIF (NA = 2,64,0),UB + OF: FOR IX = 1 TO NA:RX = RND (1) * 327
68:VX!(IX - 1) = IIF (TY$ = "F",RX, IIF (TY$ = "I", INT (RX), INT ( RND (1) * 3
2))): NEXT
207 PRINT LI$("VX!(0); IIF (NA = 2,"" + STR$ (VX!(1)),"")")=" IIF (NA = 2,
USR (VX!(0),VX!(1)), USR (VX!(0))): PRINT IIF (TY$ = "F","INDICATOR " + STR$ (
PEEK (40128)) + CHR$ (13),"");:OF += 3
209 NEXT
210 DEFUSR0 = 64,UB: DEFUSR1 = 64,UB + 3: DEFUSR2 = UB + 6: DEFUSR3 = 64,U
B + 9: DEFUSR4 = 64,UB + 12: DEFUSR5 = 64,UB + 15: DEFUSR6 = UB + 18: DEFUSR7
= 64,UB + 21: DEFUSR8 = 64,UB + 24
211 PRINT "PRESS ANY KEY TO CONTINUE";: GET S$: PRINT : PRINT CHR$ (4)"PR#3":
PRINT "PROCEDURAL FUNCTION SAMPLE LISTING": LIST 212: LIST 4000,4010: PRINT "PR
ESS ANY KEY TO CONTINUE";: GET S$: PRINT CHR$ (21)
212 GOSUB 800: CLEAR : GOSUB 801: HOME : PRINT "PROCEDURAL FUNCTIONS SAMPLE RU
N": DEFUSR = 129,S,N$,4000: FOR I = 1 TO 8: PRINT I, USR (I): NEXT : PRINT "PRE
SS ANY KEY TO CONTINUE";: GET S$: PRINT
220 HOME : PRINT "BYTE SUBTYPE HANDLING": PRINT "(COMPARED TO FP AND INTEGER 1
6BITS)": LIST 221: LIST 2219,2220: VTAB PEEK (37)
221 GOSUB 800: CLEAR : DEFSNG I: GOSUB 2219:V$ = "USING FP": GOSUB 999: GOSUB
800: CLEAR : DEFINT I: GOSUB 2219:V$ = "USING 16BITS INTS": GOSUB 999: GOSUB 800
: CLEAR : DEFBYTE I: GOSUB 2219:V$ = "USING 8BITS INTS (BYTES)": GOSUB 999
799 END
800 POKE 1024,TS% + 2: POKE 1025,VS%: RETURN
801 TS% = PEEK (1024) - 2:VS% = PEEK (1025): RETURN
901 POKE 1024,66 + 128: POKE 1025,89 + 128: RETURN
997 END
998 REM GET TIME FROM THUNDERCLOCK

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999  ON TS% = - 2 GOTO 1010: ON TS% = 8 GOTO 1009: ON TS% > 0 GOTO 1000: ON N
OT OP% GOTO 1008: PRINT V$" TOOK SOME TIME.": RETURN
1000 TR% = PEEK (242): POKE 242,0:CV% = PEEK (37): PRINT CHR$ (4)"PR#"TS%: P
RINT CHR$ (4)"IN#"TS%
1002  INPUT " ";T$: INPUT "#";MO%,DW%,DT%,HR%,MN%,SE%: PRINT CHR$ (4)"PR#"VS%:
PRINT CHR$ (4)"IN#"VS%
1003  POKE 242,TR%: VTAB CV% + 1
1004 TH! = SE% + 60 * (MN% + 60 * HR%):TD% = DT%
1005  IF OP% THEN DT! = (TH! - TB!) + (TH! < TB!) * (TD% - TE%) * 86400: PRINT
V$" TOOK "DT!" SEC."
1007 TB! = TH!:TE% = TD%
1008 OP% = 1: RETURN
1009  CALL 772,DT%,HR%,MN%,SE%: GOTO 1004: REM IF 2GS
1010  CALL 769,DT%,HR%,MN%,SE%: GOTO 1004: REM IF SMT/NSC
1100  GOSUB 2100: FOR J0 = 1 TO 2: PRINT J0"/"IT: NEXT J0: GOSUB 2000: RETURN
1200  GOSUB 2100: FOR J1 = 1 TO 4: PRINT J1"/"IT: NEXT J1: GOSUB 2000: RETURN
1300  GOSUB 2100: FOR J2 = 1 TO 6: PRINT J2"/"IT: NEXT J2: GOSUB 2000: RETURN
2000  PRINT "SUBROUTINE #"IT" COMPLETED": RETURN
2100  PRINT "SUBROUTINE #"IT" ENTERED": RETURN
2219 IX = 0:I1 = 0: GOSUB 801: GOSUB 901:OP% = 0: GOSUB 999
2220  FOR I0 = - 128 TO 126:IX = - 128: FOR I1 = - 128 TO 126:IX += 1: NEXT
: NEXT : RETURN
2800 S = MOUSE (2): ON S < 32 GOTO 2830:XI = PEEK (36):YI = PEEK (37): GOSUB
3120:X = MOUSE (0):Y = MOUSE (1): GOSUB 3100: GOSUB 3110:XO = X:YO = Y: HTAB
XI + 1: VTAB YI + 1
2830  RETURN
2900 XJ = PEEK (36):YJ = PEEK (37): CALL RE!,11,22,1,"SECOND(S) ELAPSED: "SC%
;:SC% += 1: VTAB YJ + 1: HTAB XJ + 1: RETURN
3100  VTAB 1: HTAB 1: CALL - 868: PRINT "X:"X,"Y:"Y,"S:"S;: RETURN
3110  CALL RE!,11,Y,X,L$;: RETURN
3120  CALL RE!,11,YO,XO," ";: RETURN
4000  REM S=FUNCTION(N%)
4002  REM SUM(I) FOR I FROM 0 TO N
4003  REM CACHE WITH N0%,S0
4004  ON SGN (N% - N0%) + 2 GOTO 4008,4010
4005  S = S0: FOR I = N0% + 1 TO N%
4006  S += I: NEXT
4007  N0% = N%:S0 = S: RETURN
4008  ON N% > N0% * .5 GOTO 4009:S = 0: FOR I = 1 TO N%:S += I: NEXT :N0% = N%:
S0 = S: RETURN
4009  S = S0: FOR I = N% + 1 TO N0%:S -= I: NEXT :N0% = N%:S0 = S: RETURN
4010  S = S0: RETURN
51000 DATA "GCD",2,"I","LCM",2,"I"
51002 DATA "FACT",1,"L"
51003 DATA "BINORA",2,"I","BINEOR",2,"I","BINAND",2,"I"
51006 DATA "WPEEK",1,"I"
51007 DATA "FPMAX",2,"F","FPMIN",2,"F"
51009 DATA "FIN"
60000 RETURN

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