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10 WIDTH80
20 CLS:CLS
30 LOCATE 0,10
40 PRINT"*****
50 PRINT" * Tapiolan SRK:n Pienoisrautatiekerho *
60 PRINT" * Computer / Model Railway -Interface *
70 PRINT" * versio 1.11 19-11-1988 *
80 ' 3200 Muista! *
90 ' * copyright (c) Pekka Siiskonen *
100 PRINT" *
110 PRINT" *****
120 '
130 ON ERROR GOTO 3650
140 DEFINT A-Z :JS=1 'Joystick portti 1 kytkee kojat. F napp.
150 RM=13: IT=1: LA=2 'MaxiRotari,ITasuunta,Lansisuunta
160 OJ=0: EJ=1: PA=3 'OnJuna,EiJunaa;PAikalliskaytto
170 CX=0: CY=0: ER=0' Cursorin koordinaatit ennen keskeytystä!Oma Error
180 VV=99
190 FOR AL=1 TO 4
200 PV(AL)=99
210 NEXT
220 DIM RJ(RM), RS(RM), RP(RM) 'RotarillaJuna;Rot.Suunta;Rot.Pakki;
230 DIM XJ(RM), XS(RM), XP(RM) 'RotarillaJuna;Rot.Suunta;Rot.Pakki;VANHAT
240 DIM SI(RM), SL(RM), PM(RM) 'SeurItas.rotari;Seur.Lansis.rotari;PakkiMuisti!
250 DIM XM(RM), VA(8) 'PakkiMuisti,VANHA!
260 FOR Q=1 TO RM
270 XJ(Q)=9:XS(Q)=9:XP(Q)=9:XM(Q)=9
280 RJ(Q)=0:RS(Q)=0:RP(Q)=0:PM(Q)=0
290 NEXT
300 DIM RI(RM): GOSUB 3430 'Rotari-indexit;(Alkiot ladataan subrutiinissa)
310 FOR Q=1 TO RM-1 'Ladataan Seur.It.alkiot
320 SI(Q)=Q+1
330 NEXT
340 SI(RM)=1
350 FOR Q=2 TO RM 'Ladataan seur.La.alkiot
360 SL(Q)=Q-1
370 NEXT
380 SL(1)=RM
390 FOR Q=1 TO 20 'Poistetaan alkukuva
400 PRINT
410 NEXT
420 GOSUB 1070 'Pohjakuvan piirto
430 GOSUB 1380 'Funktionappainten Aktivointi
440 '*****
REAALIAIKALOOPPI*****
450 IF T=1 THEN GOSUB 3490 ELSE GOSUB 940 'Tosi kysymyksessako?
451 ON SG GOTO453,454
452 GOTO 460
453 GOSUB 1580:GOTO455
454 GOSUB 3790
455 SG=0
456 ON SRIG GOSUB 1580,3790
460 GOSUB 500 'Rotareiden kytkennät ja irroitukset (ALY)
470 GOSUB 1260'NAYTON PAIVITYS
480 GOSUB 3020'RELEIDEN OHJAUS
490 GOTO 450 'PALUU ALKUUN
500 FOR Q= 1 TO RM
510 IF RS(Q)<>0 AND RP(Q)=PM(Q) THEN PM(Q)=0
520 IF RP(Q)=0 THEN GOTO 630
530 IF RS(Q)=PA THEN GOTO 630
540 IF RJ(Q)=OJ THEN GOTO 630
550 IF RS(Q)=0 THEN GOTO 600
560 IF RS(Q)=LA THEN ED=SI(Q): SE=SL(Q)
570 IF RS(Q)=IT THEN ED=SL(Q): SE=SI(Q)
580 IF RJ(ED)=OJ AND RP(Q)=RP(ED) THEN GOTO 630
590 IF RJ(Q)=EJ AND RJ(SE)=EJ THEN GOTO 630
600 IF RS(Q)=0 AND PM(Q)=0 THEN PM(Q)=RP(Q)
610 IF PM(Q)<>0 AND RP(Q)<>PM(Q) AND RS(Q)=0 THEN GOTO 630
620 RP(Q)=0: RS(Q)=0
630 NEXT
640 FOR Q= 1 TO RM
650 IF RJ(Q)=EJ THEN GOTO 740

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660 IF RP(Q)=0 THEN GOTO 760
670 IF RS(Q)=0 OR RS(Q)=PA THEN GOTO 740
680 IF RS(Q)=LA THEN SEUR=SL(Q): ED=SI(Q)
690 IF RS(Q)=IT THEN ED=SL(Q): SEUR=SI(Q)
700 IF RJ(SEUR)=OJ THEN GOTO 740
710 IF RP(SEUR)<>0 THEN GOTO 740
720 IF RP(ED)=RP(Q) THEN GOTO 740
730 RP(SEUR)=RP(Q)
740 NEXT
750 GOTO 770
760 IF RS(Q)=0 THEN RP(Q)=PM(Q): PM(Q)=0: GOTO 740
770 VI= VA(1)+(VA(2)*2)+(VA(3)*4): IF VI=VV THEN RETURN
780 'VI= VA(1)+(VA(2)*2): IF VI=VV THEN RETURN
790 VV=VI
800 IF(VIAND4)=0 THEN GOTO830
810 LOCATE36,11: PRINT "]"|";: LOCATE 48,11: PRINT"|[";:LOCATE49,13:PRINTSPC(5):
IF ST=0 THEN LOCATE 39,9:PRINTSPC(17)
820 SL(13)=9:SI(9)=13:GOTO850
830 LOCATE36,11: PRINT "--";: LOCATE 48,11: PRINT"--";:LOCATE 50,13:PRINT"LV"
840 SL(13)=12:SI(9)=10:GOSUB1600
850 ON VIAND3 GOTO 880,900,920
860 LOCATE 8,11: PRINT "--";: LOCATE 13,11: PRINT"--";
870 SI(2)=3: SI(3)=4: SL(3)=2: SL(4)=3:RETURN
880 LOCATE 8,11: PRINT "]"|";: LOCATE 13,11: PRINT"--";
890 SI(2)=0: SI(3)=4: SL(3)=0: SL(4)=3: RETURN
900 LOCATE 8,11: PRINT "--";: LOCATE 13,11: PRINT"|[";
910 SI(2)=3: SI(3)=0: SL(3)=2: SL(4)=0: RETURN
920 LOCATE 8,11: PRINT "]"|";: LOCATE 13,11: PRINT"|[";
930 SI(2)=4: SI(3)=0: SL(3)=0: SL(4)=2: RETURN
940 K$=INKEY$
950 IF K$="" THEN RETURN
960 Q=((ASC(K$))-96)
970 IF K$="1" THEN VA(1)=VA(1)XOR1
980 IF K$="2" THEN VA(2)=VA(2)XOR1
990 IF K$="3" THEN VA(3)=VA(3)XOR1
1000 IF K$="4" THEN VA(4)=VA(4)XOR1
1010 IF K$="5" THEN VA(5)=VA(5)XOR1
1020 IF K$="6" THEN VA(6)=VA(6)XOR1
1030 IF K$="7" THEN VA(7)=VA(7)XOR1
1040 IF Q<1 OR Q>13 THEN RETURN
1050 RJ(Q)=RJ(Q)XOR1
1060 RETURN
1070 CLS: CLS
1080 LOCATE 0,0:
PRINT"
|
1090 PRINT"|=====ODOTA!
=====|"
1100 FOR Y=1 TO 15
1110 PRINT"|
|"
1120 NEXT
1130 PRINT"|-----|
|"
1140 PRINT"| kierrosaika ilm. nayt. sek. |
|"
1150 PRINT"| |
|"
1160 PRINT"| kierrosaika sek. |
|"
1170
PRINT" |
|"
1180 LOCATE 0,10
1190 PRINT" | 1 2 3 4 5 6 7 8 9 0 1 2 3"
1200 PRINT" |-----<Twin-t"
1210 PRINT" | a b c d e f g h i j k l m"
1220 PRINT" | | KAU | | KYL | | TAU | | SAT | | LV"
1230 LOCATE 59,14: PRINT"<Kyt. ajo1.": LOCATE 59,15: PRINT"<Muisti"
1240 LOCATE 43,17: PRINT"Releet>":LOCATE 12,1:PRINT"ALUSTUS"
1250 RETURN
1260 LOCATE 25,18:PRINT USING"##.##";TIME/50

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1270 FOR Q=1 TO RM
1280 IF XS(Q)=RS(Q)ANDXJ(Q)=RJ(Q)ANDXP(Q)=RP(Q)ANDXM(Q)=PM(Q) THEN GOTO 1340
ELSE XS(Q)=RS(Q):XJ(Q)=RJ(Q):XP(Q)=RP(Q):XM(Q)=PM(Q)
1290 IFRS(Q)=0 THEN P1=32 ELSE IF RS(Q)=IT THEN P1=62 ELSE IF RS(Q)=LA
THEN P1=60 ELSE IFRS(Q)=PA THEN P1=80:
1300 P2=RJ(Q):IF P2=0 THEN P2=42 ELSE P2=45
1310 P3=PM(Q)+48:IF P3=48THEN P3=46:
1320 P4=RP(Q)+48:IF P4=48THEN P4=46:
1330 'VPOKE4895+Q*4,P1:VPOKE4975+Q*4,P2:VPOKE5295+Q*4,P3:VPOKE5215+Q*4,P4
1331 VPOKE799+Q*4,P1:VPOKE879+Q*4,P2:VPOKE1199+Q*4,P3:VPOKE1119+Q*4,P4
1340 NEXT
1350 LOCATE25,20: PRINT USING"##.##";TIME/50;; TIME=0
1360 IF CK=0 THEN PRINT"*":CK=1 ELSE PRINT" ":CK=0
1370 RETURN
1380 KEYOFF
1390 KEY(1)ON
1400 KEY(2)ON
1410 KEY(3)ON
1420 KEY(4)ON
1430 KEY(5)ON
1440 KEY(6)ON
1450 KEY(7)ON
1460 KEY(8)ON
1470 KEY(9)ON
1480 KEY(10)ON
1490 STRIG(0)ON:IF JS=1 THEN STRIG(1)ON
1500 ON STRIG GOSUB 1580,3790
1510 ON KEY GOSUB 1940,2130,2220,2310,2400,2470,2570,2620,2710,2760
1520 FOR Q=1 TO RM
1530 RJ(Q)=EJ
1540 NEXT
1550 TIME=0: GOSUB 2800
1560 LOCATE 10,1: PRINT"ODOTA!===="
1570 RETURN
1580 CY=CSRLIN: CX=POS(0):IF ER=1 THEN GOSUB 3690:GOTO 1590 ELSE ST=ST+1:
IF ST>3 THEN ST=0
1590 IF KO=0 THEN LOCATE 40,1:PRINT"======"
1591 IF KO<>0 THEN KO=0:LOCATE 40,1:PRINT"====Kojetaulun St=";ST;"Fu="FU
1600 IF ST=1 THEN GOTO 1710
1610 IF ST=2 THEN GOTO 1740
1620 IF ST=3 THEN GOTO 1770
1630 IF ST=4 THEN GOTO 1800
1640 IF ST=5 THEN GOTO 1830
1650 IF ST=6 THEN GOTO 1860
1660 IF ST=7 THEN GOTO 1890
1670 LOCATE 10,1:PRINT"=KULKUTIET VARAUKSET====="
1680 LOCATE 0,9:PRINT"| <F1 F6> <F2 F7> <F3 F8> <F4 F9> <F5 F10>"
1690 IF VA(3)<>0THEN LOCATE 39,9:PRINT SPC(17)
1700 LOCATE CX,CY:RETURN
1710 LOCATE 10,1:PRINT"=KULKUTIET HATAPURKU====="
1720 LOCATE 0,9:PRINT"| <F1 F6> <F2 F7> <F3 F8> <F4 F9> <F5 F10>"
1730 LOCATE CX,CY:RETURN
1740 LOCATE 10,1:PRINT"=PAIKALLISLUVAT ANTO====="
1750 LOCATE 0,9:PRINT"|F6=c r F1 r F2r r F3 r r F4r F5 "
1760 LOCATE CX,CY:RETURN
1770 LOCATE 10,1:PRINT"=PAIKALLISLUVAT PURKU====="
1780 LOCATE 0,9:PRINT"|F6=c r F1 r F2r r F3 r r F4r F5 "
1790 LOCATE CX,CY:RETURN
1800 LOCATE 10,0:PRINT"<POISTA VIRTA+MUISTI>====="
1810 LOCATE 0,9:PRINT" <F1 F6> <F2 F7> <F3 F8><F4 F9><F5 F1F>"
1820 LOCATE CX,CY:RETURN
1830 LOCATE 10,0:PRINT"SIJOITA KULJ.1====="
1840 LOCATE 0,9:PRINT" <F1 F6> <F2 F7> <F3 F8><F4 F9><F5 F1F>"
1850 LOCATE CX,CY:RETURN
1860 LOCATE 10,0:PRINT"SIJOITA KULJ.2====="
1870 LOCATE 0,9:PRINT" <F1 F6> <F2 F7> <F3 F8><F4 F9><F5 F1F>"
1880 LOCATE CX,CY:RETURN
1890 LOCATE 10,0:PRINT"SIJOITA KULJ.3====="
1900 LOCATE 0,9:PRINT" <F1 F6> <F2 F7> <F3 F8><F4 F9><F5 F1F>"
1910 LOCATE CX,CY:RETURN
1920 '***** FUNKTIONAPPAINTEN TOIMINNOT *****
1930 '===== F1 =====

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1940 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F1"
1950 IF ST=0 AND VA(3)=0 THEN GOTO 1980
1960 IF ST=0 THEN IF VA(1)=1 GOTO 1970 ELSE IF (RJ(3)=EJ AND (VA(2)=1 OR
      RS(4)<>LA)) GOTO 3670 ELSE IF RJ(1)=OJ OR RJ(2)=OJ OR RJ(13)=OJ OR RP(9)<>0
      OR RS(8)=IT GOTO 3670 ELSE
RS(1)=LA: RS(2)=LA: RS(3)=LA: RS(13)=LA: RS(9)=LA:
      GOTO 2000
1970 IF ST=0 THEN IF (RJ(2)=EJ AND (VA(2)=0 OR RS(4)<>LA)) THEN GOTO 3670 ELSE
      IF RJ(1)=OJ OR RJ(13)=OJ OR RP(9)<>0 OR RS(8)=IT THEN GOTO 3670 ELSE
      RS(1)=LA: RS(2)=LA: RS(13)=LA: RS(9)=LA: GOTO 2110
1980 IF ST=0 THEN IF VA(1)=1 THEN GOTO 1990 ELSE IF (RJ(3)=EJ AND (VA(2)=1 OR
      RS(4)<>LA)) THEN GOTO 3670 ELSE IF RJ(1)=OJ OR RJ(2)=OJ OR RP(13)<>0 OR
      RS(12)=IT THEN GOTO 3670 ELSE RS(1)=LA: RS(2)=LA: RS(3)=LA: GOTO 2000
1990 IF ST=0 THEN IF (RJ(2)=EJ AND (VA(2)=0 OR RS(4)<>LA)) THEN GOTO 3670 ELSE
      IF RJ(1)=OJ OR RP(13)<>0 OR RS(12)=IT THEN GOTO 3670 ELSE
      RS(1)=LA: RS(2)=LA: GOTO 2110
2000 IF ST=0 THEN GOTO 2110
2010 IF ST=1 THEN RS(1)=0: RP(1)=0: RS(2)=0: IF VA(1)=0 THEN RS(3)=0: IF
      RJ(2)=EJ THEN RP(2)=0
2020 IF ST=1 THEN GOTO 2110
2030 IF ST=2 THEN IF (RJ(2)=EJ AND RJ(4)=EJ) THEN IF RJ(3)<>0 GOTO 3710 ELSE
      GOTO 2040 ELSE IF RP(2)=RP(4) GOTO 3710 ELSE IF RJ(3)=OJ GOTO 2050 ELSE
      GOTO 2040
2040 IF ST=2 THEN RS(2)=PA: RS(3)=PA: RS(4)=PA: RP(2)=RP(2)+RP(3)+RP(4):
      RP(3)=RP(2): RP(4)=RP(2): GOTO 2110
2050 IF ST=2 THEN RS(2)=PA: RS(4)=PA: IF RP(2)>RP(4) THEN RP(4)=RP(2) ELSE
      RP(2)=RP(4): GOTO 2110
2060 IF ST=3 THEN IF RP(3)=RP(4) THEN IF (RJ(2)=EJ AND RJ(3)=EJ AND RJ(4)=EJ)
      GOTO 3730 ELSE GOTO 2070 ELSE IF (RJ(2)=EJ AND RJ(4)=EJ) GOTO 3730 ELSE
      GOTO 2090
2070 IF ST=3 THEN RS(2)=0: RS(3)=0: RS(4)=0: IF RJ(2)=OJ THEN RP(3)=0: RP(4)=0
      ELSE IF RJ(3)=OJ THEN RP(2)=0: RP(4)=0 ELSE RP(2)=0: RP(3)=0
2080 IF ST=3 GOTO 2110
2090 IF ST=3 THEN RS(2)=0: RS(4)=0: IF RJ(2)=OJ THEN RP(4)=0 ELSE RP(2)=0
2100 IF ST=3 GOTO 2110
2110 LOCATE CX,CY: RETURN
2120 '===== F2 =====
2130 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F2"
2140 IF ST=0 THEN IF (RJ(5)=EJ AND RS(6)<>LA) THEN GOTO 3670 ELSE IF RP(4)<>0 OR
      (VA(2)=0 AND VA(1)=1) OR (VA(2)=0 AND RJ(3)=OJ) OR (VA(2)=1 AND RJ(2)=OJ) OR
      RS(2)=IT THEN GOTO 3670 ELSE RS(4)=LA: RS(5)=LA: GOTO 2200 'F2
2150 IF ST=1 THEN RS(4)=0: RS(5)=0: IF RJ(4)=OJ THEN GOTO 2200 ELSE RP(4)=0:
      GOTO 2200
2160 IF ST=2 THEN IF (RP(5)=RP(6)) OR (RJ(5)=EJ AND RJ(6)=EJ) THEN GOTO 3710 ELSE
      RS(5)=PA: RS(6)=PA
2170 IF ST=2 THEN IF RP(5)>RP(6) THEN RP(6)=RP(5) ELSE RP(5)=RP(6)
2180 IF ST=3 THEN RS(5)=0: RS(6)=0
2190 IF ST=3 THEN IF RJ(5)=EJ THEN RP(5)=0 ELSE RP(6)=0
2200 LOCATE CX,CY: RETURN
2210 '===== F3 =====
2220 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F3"
2230 IF ST=0 THEN IF (RJ(8)=EJ AND RS(9)<>LA) OR RP(5)<>0 OR RJ(6)=OJ OR RJ(7)=OJ
      OR RS(5)=IT THEN GOTO 3670 ELSE RS(6)=LA: RS(7)=LA: RS(8)=LA: GOTO 2290 'F3
2240 IF ST=1 THEN RS(6)=0: RS(7)=0: RP(7)=0: RS(8)=0: GOTO 2290
2250 IF ST=2 THEN IF (RP(8)=RP(9)) OR (RJ(8)=EJ AND RJ(9)=EJ) THEN GOTO 3710 ELSE
      RS(8)=PA: RS(9)=PA
2260 IF ST=2 THEN IF RP(8)>RP(9) THEN RP(9)=RP(8) ELSE RP(8)=RP(9)
2270 IF ST=3 THEN RS(8)=0: RS(9)=0
2280 IF ST=3 THEN IF RJ(8)=EJ THEN RP(8)=0 ELSE RP(9)=0
2290 LOCATE CX,CY: RETURN
2300 '===== F4 =====
2310 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F4"
2320 IF ST=0 THEN IF (RJ(10)=EJ AND RS(11)<>LA) OR RP(8)<>0 OR RJ(9)=OJ OR
      RS(8)=IT THEN GOTO 3670 ELSE RS(9)=LA: RS(10)=LA: GOTO 2380 'F4
2330 IF ST=1 THEN RS(9)=0: RS(10)=0: IF RJ(9)=OJ THEN GOTO 2380 ELSE RP(9)=0:
      GOTO 2380
2340 IF ST=2 THEN IF (RP(10)=RP(11)) OR (RJ(10)=EJ AND RJ(11)=EJ) THEN GOTO 3710
      ELSE RS(10)=PA: RS(11)=PA
2350 IF ST=2 THEN IF RP(10)>RP(11) THEN RP(11)=RP(10) ELSE RP(10)=RP(11)
2360 IF ST=3 THEN RS(10)=0: RS(11)=0
2370 IF ST=3 THEN IF RJ(10)=EJ THEN RP(10)=0 ELSE RP(11)=0
2380 LOCATE CX,CY: RETURN

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2390 '===== F5 =====
2400 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F5"
2410 IF ST=0 THEN IF (RJ(13)=EJ AND RS(1)<>LA) OR RP(10)<>0 OR RJ(11)=OJ OR
    RJ(12)=OJ OR RS(10)=IT THEN GOTO 3670 ELSE RS(11)=LA: RS(12)=LA: RS(13)=LA:
        GOTO 2790 'F5
2420 IF ST=1 THEN RS(11)=0 : RS(12)=0 : RP(12)=0 : RS(13)=0 : GOTO 2790
2430 IF ST=2 THEN IF RJ(13)=EJ GOTO 3710 ELSE RS(13)=PA: GOTO 2790
2440 IF ST=3 THEN RS(13)=0 : GOTO 2790
2450 LOCATE CX,CY: RETURN
2460 '===== F6 =====
2470 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F6"
2480 IF ST=0 THEN IF VA(2)=1 THEN GOTO 2490 ELSE IF (RJ(3)=EJ AND (VA(1)=1 OR
    RS(2)<>IT)) OR RJ(4)=OJ OR RJ(5)=OJ OR RP(6)<>0 OR RS(6)=LA THEN GOTO 3670
        ELSE RS(3)=IT: RS(4)=IT: RS(5)=IT: GOTO 2790
2490 IF ST=0 THEN IF (RJ(4)=EJ AND (VA(1)=0 OR RS(2)<>IT)) OR RJ(5)=OJ OR RP(6)<>0
    OR RS(6)=LA THEN GOTO 3670 ELSE RS(4)=IT: RS(5)=IT: GOTO 2790
2500 IF ST=0 THEN GOTO 2790
2510 IF ST=1 THEN IF VA(2)=0 THEN RS(3)=0: RS(4)=0: RS(5)=0: IF RJ(4)=OJ THEN IF
    RJ(5)=EJ THEN RP(5)=0 ELSE ELSE RP(4)=0
2520 IF ST=1 THEN IF VA(2)=1 THEN RS(4)=0 : RS(5)=0 : IF RJ(5)=EJ THEN RP(4)=0
2530 IF ST=2 THEN IF RJ(3)=EJ THEN GOTO 3710 ELSE RS(3)=PA: GOTO 2790
2540 IF ST=3 THEN RS(3)=0 : GOTO 2790 ELSE GOTO 2790
2550 LOCATE CX,CY: RETURN
2560 '===== F7 =====
2570 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F7"
2580 IF ST=0 THEN IF (RJ(6)=EJ AND RS(5)<>IT) OR RJ(7)=OJ OR RJ(8)=OJ OR RP(9)<>0
    OR RS(9)=LA THEN GOTO 3670 ELSE RS(6)=IT: RS(7)=IT: RS(8)=IT: GOTO 2790 'F7
2590 IF ST=1 THEN RS(6)=0 : RS(7)=0 : RP(7)=0: RS(8)=0 : GOTO 2790
2595 IF ST>1 THEN GOTO 2160
2600 LOCATE CX,CY: RETURN
2610 '===== F8 =====
2620 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F8"
2630 IF ST=0 AND VA(3)=0 GOTO 2650
2640 IF ST=0 THEN IF (RJ(9)=EJ AND RS(8)<>IT) OR RJ(13)=OJ OR RJ(1)=OJ OR
    RJ(2)=OJ OR RP(2)<>0 OR RP(SI(2))<>0 OR RS(SI(2))=LA OR VA(1)<>VA(2)
        THEN GOTO 3670 ELSE RS(9)=IT: RS(13)=IT: RS(1)=IT: RS(2)=IT: GOTO
2790 'F8
2650 IF ST=0 THEN IF (RJ(9)=EJ AND RS(8)<>IT) OR RJ(10)=OJ OR RP(11)<>0 OR
    RS(11)=LA THEN GOTO 3670 ELSE RS(9)=IT: RS(10)=IT: GOTO 2790 'F8
2660 IF ST=1 AND VA(3)=0 THEN GOTO 2680
2670 IF ST=1 THEN RS(9)=0: RS(13)=0: RS(1)=0: RS(2)=0: RP(13)=0: RP(1)=0: RP(2)=0:
    GOTO 2790
2680 IF ST=1 THEN RS(9)=0 : RS(10)=0 : GOTO 2790
2685 IF ST>1 THEN GOTO 2250
2690 LOCATE CX,CY: RETURN
2700 '===== F9 =====
2710 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F9"
2720 IF ST=0 THEN IF (RJ(11)=EJ AND RS(10)<>IT) OR RJ(12)=OJ OR RP(13)<>0 OR
    RS(13)=LA THEN GOTO 3670 ELSE RS(11)=IT: RS(12)=IT: GOTO 2790 'F9
2730 IF ST=1 THEN RS(11)=0 : RS(12)=0 : RP(12)=0: GOTO 2790
2735 IF ST>1 THEN GOTO 2340
2740 LOCATE CX,CY: RETURN
2750 '===== F10 =====
2760 CY=CSRLIN: CX=POS(0): LOCATE 40,1: PRINT "F10"
2770 IF ST=0 THEN IF (RJ(13)=EJ AND RS(12)<>IT) OR RJ(1)=OJ OR RJ(2)=OJ OR
    RP(2)<>0 OR RP(SI(2))<>0 OR RS(SI(2))=LA OR VA(1)<>VA(2) THEN GOTO 3670
ELSE
    RS(1)=IT: RS(2)=IT: RS(13)=IT: GOTO 2790 'F10
2780 IF ST=1 THEN RS(1)=0 : RP(1)=0: RS(2)=0 : RS(13)=0 : GOTO 2790
2785 IF ST>1 THEN GOTO 2430
2790 LOCATE CX,CY: RETURN
2800 '***** ALKUSIJOKSET *****
2810 LOCATE 1,3
2820 PRINT "Onko tosi kysymyksessa(k/e)?" : V$=INPUT$(1)
2830 LOCATE 50,1: IF V$="k" THEN PRINT "Rata kytk": T=1 ELSE PRINT "Simul.liik."
2840 LOCATE 1,3
2850 PRINT "Anna junien sijainnit kayttaen PIENIA kirjaimia"
2860 FOR J = 1 TO 3
2870 PRINT " | Anna junan nro " J " sijainti? " : K$=INPUT$(1) : PRINT K$
2880 Q=((ASC(K$))-96): IF Q<1 OR Q>RM THEN GOTO 2900
2890 PM(Q)=J
2900 NEXT

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2910 LOCATE 10,1:PRINT"ODOTA!=="
2920 FOR Q=1 TO 5
2930 LOCATE 1,2+Q:PRINT SPC(55)
2940 NEXT
2950 GOSUB 3490:GOSUB 1260:STOP ON:ON STOP GOSUB3630
2960 LOCATE10,1:PRINT"ALUSTUS==":LOCATE 1,3:PRINT"ke1paako(k/e)?" ;:v$=INPUT$(1)
2970 IF v$="k"OR v$=CHR$(13) THEN LOCATE 1,3:PRINT SPC(20):RETURN
2980 FOR Q=1 TO RM
2990 PM(Q)=0:XM(Q)=9
3000 NEXT
3010 GOSUB 1070:GOTO 2810
3020 '***** RELEIDEN OHJAUS *****
3021 ON STRIG GOSUB 1580,4100
3030 AR(2)=0 'apurele joka kyt. 2 ja 3 yhteen
3040 FOR Q=1 TO 2
3050 IF RP(Q)=0 THEN GOTO3070
3060 AL=RP(Q):PI(AL)=PI(AL)+RI(Q)
3070 NEXT
3080 IF RP(3)=0 THEN GOTO3100
3090 AL=RP(3):IF PI(AL)=8 THEN PI(AL)=10 ELSE PI(AL)=PI(AL)+16
3100 IF RP(4)=0 THEN GOTO3120
3110 AL=RP(4):IF PI(AL)=10 THEN PI(AL)=11:AR(2)=1 ELSE PI(AL)=PI(AL)+3
3120 FOR Q=5 TO 12
3130 IF RP(Q)=0 THEN GOTO3150
3140 AL=RP(Q):PI(AL)=PI(AL)+RI(Q)
3150 NEXT
3160 'IF RP(13)=0 THEN MO=0:VPOKE5660,45:GOTO3180
3161 IF RP(13)=0 THEN MO=0:VPOKE1564,45:GOTO3180
3170 'AL=RP(13):IF RP(9)=AL THEN MOTORON:VPOKE5660,77 ELSE PI(AL)=PI(AL)
+56:MO=1:
VPOKE5660,45
3171 AL=RP(13):IF RP(9)=AL THEN MOTORON:VPOKE1564,77 ELSE PI(AL)=PI(AL)
+56:MO=1
:VPOKE1564,45
3180 GOSUB 3290
3190 FOR AL=1 TO 4
3200 IF PV(AL)=PI(AL) THEN PI(AL)=0:GOTO 3270
3210 LOCATE50,16+AL:PRINT SPC(15)
3220 LOCATE50,16+AL:PRINT AL;;PRINT (PI(AL));:PRINT BIN$(PI(AL))
3230 IFAL=1 THENPD=128 ELSEIF AL=2 THENPD=129 ELSEIF AL=4 THENPD=145 ELSE
PD=144
3240 OUT &H91,PD:OUT &H90,0:OUT &H90,1
3250 OUT &H91,PI(AL):OUT &H90,0:OUT &H90,1
3260 PV(AL)=PI(AL):PI(AL)=0
3270 NEXT
3271 IF MO=1 THEN MOTOROFF:MO=0
3280 RETURN
3290 '***** OPASTIMET KYLA TAUSTA JA SATAMA *****
3300 IF RS(2)=LA THEN PI(1)=PI(1)+64
3310 IF RS(4)=IT THEN PI(2)=PI(2)+64
3320 IF RS(13)=IT THEN PI(3)=PI(3)+64
3330 OP=0
3340 IF RS(5)=LA THEN OP=1
3350 IF RS(6)=IT THEN OP=OP+2
3360 IF RS(8)=LA THEN OP=OP+4
3370 IF RS(9)=IT THEN OP=OP+8
3380 IF RS(10)=LA THEN OP=OP+16
3390 IF RS(11)=IT THEN OP=OP+32
3400 IF RS(13)=LA THEN OP=OP+64
3410 PI(4)=OP
3420 RETURN
3430 '***** rotareiden indexit*****
3440 FOR Q=1 TO RM
3450 READ RI(Q)
3460 NEXT
3470 DATA 1,8,0,3,24,4,32,5,40,6,48,7,56
3480 RETURN
3490 '***** RADAN LUKU *****
3491 ON SRIG GOSUB 4000,4100
3500 FOR Q=0 TO 7
3510 OUT&H91,144+Q:OUT &H90,0:OUT&H90,1
3520 RJ(Q+1)=INP(162)AND 1

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3530 NEXT
3540 FOR Q=8 TO RM-1
3550 OUT&H91,128+Q-8:OUT &H90,0:OUT&H90,1
3560 RJ(Q+1)=INP(162)AND 1
3570 NEXT
3580 FOR Q=1 TO 2
3590 OUT&H91,128+Q+4:OUT &H90,0:OUT&H90,1
3600 VA(Q)=(INP(162)AND 1)XOR1
3610 NEXT
3611 OUT&H91,135:OUT &H90,0:OUT&H90,1
3612 VA(3)=(INP(162)AND 1)
3620 RETURN
3630 '***** CTRL-STOP RUTIINI VAPAUTTAA RELEET *****
3640 PI(1)=0:PI(2)=0:PI(3)=0:PI(4)=0:MOTOROFF:GOSUB 3190:KEYON:END
3650 '***** ERROR RUTIINI VAPAUTTAA RELEET *****
3660 PI(1)=0:PI(2)=0:PI(3)=0:PI(4)=0:GOSUB 3190:KEYON:ON ERROR GOTO 0:END
3670 LOCATE 2,4:PRINT"***VAROITUS:En hyväksy kulkutieta, paina valil.":ER=1
3680 LOCATE CX,CY:RETURN
3690 LOCATE 2,4:PRINT SPC(55):ER=0
3700 LOCATE CX,CY:RETURN
3710 LOCATE 2,4:PRINT"***VAROITUS:En hyväksy paikallislupaa, paina valil.":ER=1
3720 LOCATE CX,CY:RETURN
3730 LOCATE 2,4:PRINT"***VAROITUS:En hyväksy purkua,ei junaa,paina valil.":ER=1
3740 LOCATE CX,CY:RETURN
3750 '***** Kojetaulun Funktionappaimet
*****
3760 '
3770 OUT&H91,150:OUT&H90,0:OUT&H90,1
3780 RK=((INP(162)/2)AND1)
3790 KO=1:ST=0:FU=1:CY=CSRLIN:CX=POS(0)
3800 FOR Q=0 TO1
3810 OUT&H91,144+Q:OUT &H90,0:OUT&H90,1
3820 ST=ST+((INP(162)/2)AND1)*(Q+1)
3830 NEXT
3840 'IF RK=0 THEN GOSUB 1540
3850 FOR Q=2 TO 5
3860 OUT&H91,144+Q:OUT &H90,0:OUT&H90,1
3870 FU=FU+(((INP(162)/2)AND1)XOR1)*(2^(Q-2))
3871 LOCATE Q*3,2:PRINT(((INP(162)/2)AND1)XOR1)*(2^(Q-2))
3880 NEXT
3881 OUT&H91,150:OUT&H90,0:OUT&H90,1
3882 GS=((INP(162)/2)AND1)
3886 IF GS=0 THEN LOCATE 45,1:PRINT"LUKUVIRHE=====":GOTO3920
3890 'IF RK=0 THEN GOSUB 3630
3900 GOSUB 1590
3910 ON FU GOSUB 1940,2130,2220,2310,2400,2470,2570,2620,2710,2760
3920 LOCATE CX,CY:RETURN
3930 '***** PAKIN KYTKENTA/IRR. KOJETAULUSTA *****
3940 'ON (ST-3) GOSUB 1740,1770,1800,1830
3950 'LOCATE 40,1:PRINT "rot:":PRINTCHR$(FU+96);
3960 'IF RJ(FU)=0J THEN RP(FU)=ST:PM(FU)=0 ELSE RP(FU)=0:PM(FU)=ST
3970 LOCATE 2,2:PRINTST,FU;
3980 LOCATE CX,CY:RETURN
4000 CY=CSRLIN:CX=POS(0)
4005 SG=1:LOCATE 40,1:PRINT"HETKINEN==(valil)====="
4010 LOCATE CX,CY:RETURN
4100 CY=CSRLIN:CX=POS(0)
4105 SG=2:LOCATE 40,1:PRINT"HETKINEN==(Kojet.)====="
4110 LOCATE CX,CY:RETURN

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