SFGT

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016/698623

THE PROGRAMS ON TAPE

0	SFGT MANUAL LOADER
1	SFGT MANUAL 300-B73
0	SFGT MANUAL
0	SFGT DEMO LOADER
1	SFGT DEMO 300-B73
0	SFGT DEMO
0	SFGT CREATOR LOADER
1	SFGT CREATOR 300-B73
0	SFGT CREATOR POINTER SETTING
0	SFGT CREATOR II
0	SFGT TRANSLATOR FGT-part
0	SFGT TRANSLATOR BOOTSTRAP
1	SFGT 300-820
0	SFGT TRANSLATOR
0	" " II
1	SFGT pictures + SHADOWS 300-183F

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GENERAL INFORMATION

SFGT is a machine-language program, offering the use of text, symboles and graphic characters in all graphic modes at a very high speed. SFGT is located in RAM from HEX 300 to END of tables. END of tables is depending on the number of tables that are being used. After creation of new tables, adresses for saving are given.If the option of different tables is not necessary, e.g. if only one table is being used, SFGT is located from 300-B73.

USE

Afer definition of the different parameters, SFGT-calls are executed with :

CALLM 800, XXX$

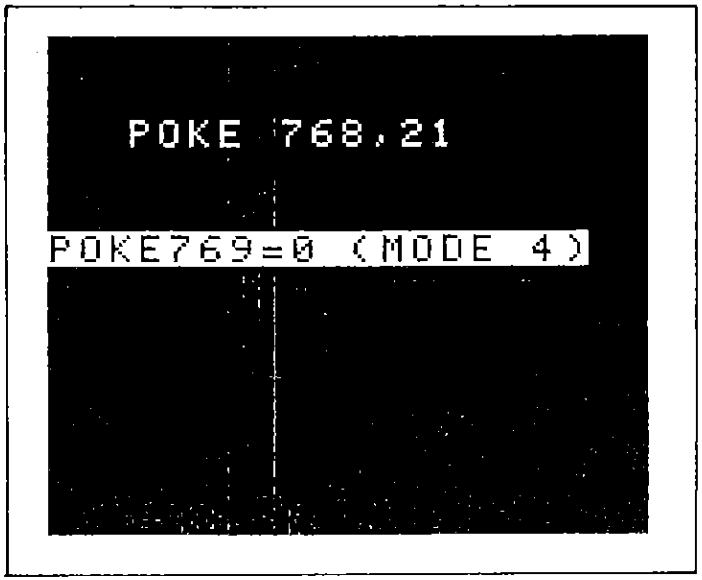
XXX$ can be a name of a string, or an element of string-array.

PARAMETERS

Parameters are located from 768 (decimal) up to 791 (decimal).

Horiz position 768

for M -4 :
POKE 76[illegible] , POS
POKE 769 , 0
for MODE 5-6 :
POKE 768 , POS MOD 256
POKE 769 , POS / 256



Vertical position 770

POKE 770 , POS

Horizontal step / character 771

STEP = 0 - 255
Normal STEP = 8
POKE 771,STEP

Vertical step / character 772

STEP = 0 - 255
0 = horizontal
9 = vertical

POKE772,0

POKE772,2

POKE772,7

Horizontal step on "OFF SCREEN" 773 (TABSTP)

STEP = o - 255
normal STEP = 8
gives horizontal "linefeed"

```
SFGTDEMO S
FGTDEMO SF
GTDEMO SFG
TDEMO SFGT
DEMO SFGTD
EMO SFGTDE
MO SFGTDEM
O SFGTDEMO
 SFGTDEMO
SFGTDEMO

POKE 773 = 4.
```

```
S F G T D E M O   S
F G T D E M O   S F
G T D E M O   S F G
T D E M O   S F G T
D E M O   S F G T D
E M O   S F G T D E
M O   S F G T D E M
O   S F G T D E M O
  S F G T D E M O
S F G T D E M O

POKE 773 = 10

DRUK UP-DOWN OF A-O
```

<u>Vertical step on "OFF SCREEN"</u> 774 (LINSTP)

STEP = 0 - 255
normal step = 9
gives vertical "linefeed".

```
POKE 774 GEEFT DE
VERTIKALE STAP
BIJ HORIZONTALE CR

MAX: 0 TOT 255
     9 = NORMAAL
```

```
SFGTDEMO SFGT          SFGTDEMO SFGT
DEMO SFGTDEMO          DEMO SFGTDEMO
 SFGTDEMO SFG           SFGTDEMO SFG
TDEMO SFGTDEM          TDEMO SFGTDEM
O SFGTDEMO SF          O SFGTDEMO SF
GTDEMO SFGTDE          GTDEMO SFGTDE
MO SFGTDEMO S          MO SFGTDEMO S
FGTDEMO                FGTDEMO

POKE774 = 6.           POKE774 = 11
```

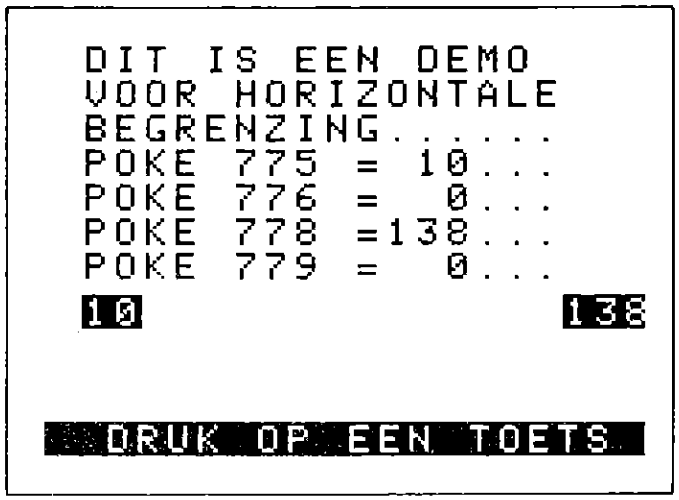
<u>WINDOW</u> 775 - 780 HORMIN - VERMIN - HORMAX - VERMAX

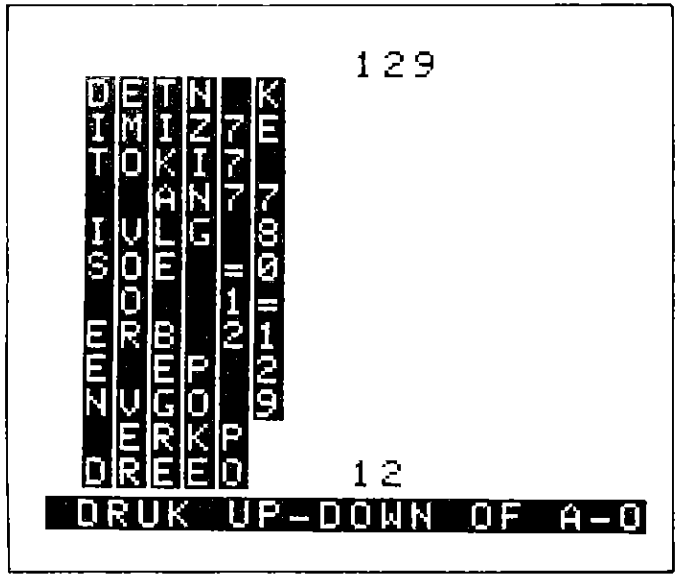
Horizontal minimum : 775 - 776 (POKE 775, MIN MOD 256)
                               (POKE 776, MIN / 256)
H[illegible] maximum : 778 - 779 idem

[illegible] minimum : 777
Vertical maximum : 780

NOTE : Min & max are adaptec [illegible] ection. (see later)

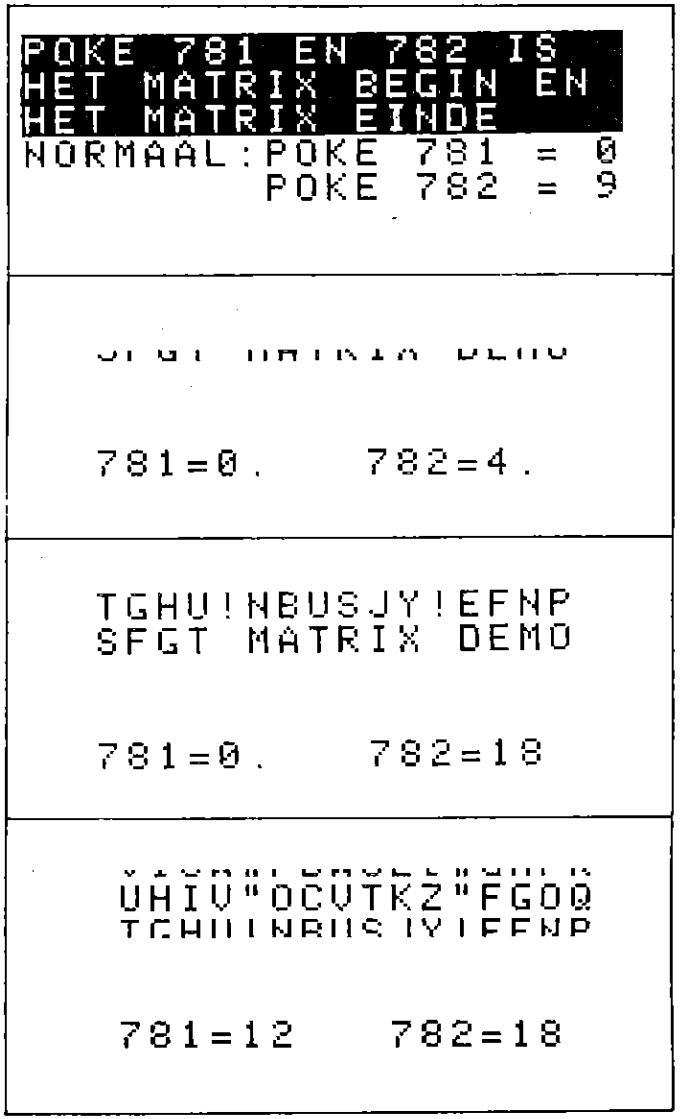
```
POKE 775 TOT 780 IS
DE SCHERMBEGRENZING
 HOR.MIN  = 775/776
 HOR.MAX  = 778/779
 VER.MIN  = 777
 VER.MAX  = 780
MAX:IDEM ALS 768+770
N.B. MIN EN MAX
WORDT AUTOMATISCH
VERWISSELD MET ZIN
 (ZIE LATER...)

  DRUK OP EEN TOETS
```





Matrix Begin - Matrix Lenght 781 - 782 (MATBEG - MATLEN)

normal conditions : POKE 781 , 0
POKE 782 , 9
Defines how many DATA you want to display from the table, and where to begin...



String definition (MID$) (STRING LENGHT) 783 - 784 (STRBEG - STRLEN)

No need to use the MID$ function from BASIC, you can define
which part of the STRING has to be displayed with these two POKES.

POKE 783 , BEGIN
POKE 784 , LENGHT (if = 0 then LENGHT = LEN(STRING)

```
POKE 783 EN 784 IS
HET STRINGBEGIN EN
 DE STRINGLENGTE
ALS 784 =0 DAN HEEFT
DE STRING ZIJN
VOLLEDIGE LENGTE
```

COMBINED DISPLAY-functions (785) (VARPOK)

before POKE into 785, calculate the values of the differe
parameters as given :

```
  0 : display right - up
  1 : display left - up
  2 : display right - down
  3 : display left - down
 +4 : retain horizontal positio
 +8 : retain vertical position
+16 : upside - down
+64 : high speed
+128 : INKEY-flag : result of inkey is located in the string
```

```
POKE 785 BEVAT DE
 SCHRIJFFUNCTIES
  0  :  RECHTS/OP
  1  :  LINKS/OP
  2  :  RECHTS/NEER
  3  :  LINKS/NEER
  4  :  BEHOUD HOR.POS
  8  :  BEHOUD VER.POS
 16  :  ONDERSTE BOVEN
 64  :  HOGE SNELHEID

   DRUK OP EEN TOETS
```



```
VB.:U WILT LINKS/OP
+ BEHOUD HOR.POS
+ HOGE SNELHEID DUS
POKE 785 =1+4+64=69
VB.:U WILT RECHTS/OP
+ BEHOUD HOR.POS.
+ BEHOUD VER.POS.DUS
POKE 785 =0+4+8=12
```

```
   DRUK OP EEN TOETS
```

```
0-3  TEST ZINFLAG 0-
G 0-3  TEST ZINFLAG
LAG 0-3  TEST ZINFLA
NFLAG 0-3  TEST ZINF
ZINFLAG 0-3  TEST ZI
T ZINFLAG 0-3  TEST
EST ZINFLAG 0-3  TES
 TEST ZINFLAG 0-3  T
  TEST ZINFLAG 0-3
3  TEST ZINFLAG 0-3
```

```
POKE 785 = 0.
```

```
   DRUK OP EEN TOETS
```

```
EEKELAC IS  TEST  0
ELAC IS  TEST  OWK
AC IS  TEST  OWKEEK
 IS  TEST  OWKEEKEL
S  TEST  OWKEEKELAC
  TEST  OWKEEKELAC I
TEST  OWKEEKELAC IS
ST  OWKEEKELAC IS
 OWKEEKELAC IS  TE
WKEEKELAC IS  TEST
```

```
POKE 785 = 16
```

```
0 GALFNIZ TSET  3-0
GALFNIZ TSET  3-0 GA
LFNIZ TSET  3-0 GALF
NIZ TSET  3-0 GALFNI
Z TSET  3-0 GALFNIZ
TSET  3-0 GALFNIZ TS
ET  3-0 GALFNIZ TSET
  3-0 GALFNIZ TSET
3-0 GALFNIZ TSET  3
-0 GALFNIZ TSET  3-
```

POKE 785 = 1.

VOOR DE INKEYSTRING
MOET POKE 785 >=128
U ROEPT DEZELFDE ROU
TINE CALLM800,.$ AAN
EN NU KUNT U EEN
WOORD INTYPEN . ALLE
MOGELIJKHEDEN ZOALS
LENSTRING -MIDSTRING
BLIJVEN BEHOUDEN.
VB.:A$ = DAINAMIC
  783=2 : 784= 5
U KUNT NU 5 LETTERS
INTYPEN OP INAMI
DRUK OP EEN TOETS

Foreground and background colours (786) (COLORS)

in 16 color modes : foreground & background color
e.g. : HEX A5 = orange characters on green background.
in 4 color modes : number of COLORG
e.g. : HEX 23 = color 2 on color 3

POKE 786 GEEFT DE
KLEUR VAN DE STRING
EERST DE FRONTKLEUR
EN DAN DE BACKGROUND
MAX:4-COLOR #00/#33
16-COLOR #00/#FF

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Delay (787) (DELAYT)

Gives delay / character.
e.g. POKE 787,20

ANIMATION TECHNIQUES (788 - 789) (DUBBEL - DUBSTP)

gives possibility of animation.

788 : number of characters / image
789 : horstap / character
771 : horstap / image

```
788 EN 789 GEVEN DE
MOGELIJKHEID VAN
ANIMATIE ZONDER FLIK
KEREND BEELD ...
788 GEEFT HET AANTAL
KARAKTERS PER BEELD
(0=GEEN ANIMATIE )
789 GEEFT DE HORSTAP
PER KARAKTER

   DRUK OP EEN TOETS
```

```
1E BEELD , DAN DELAY
2E BEELD OP ZELFDE
POSITIE+3E BEELD OP
NIEUWE POSITIE EN2.

   DRUK OP EEN TOETS
```

Table choice. (790) (TABKEU)

POKE 790, 0 - 9 (0 is standard)

```
POKE 790 GEEFT DE
TABELKEUZE
AANGEZIEN DE ANDERE
TABELLEN NOG NIET
GECREEERD ZIJN IS ER
GEEN DEMO VOORZIEN
STANDAARDTABEL = 0
MAX : 0 TOT 9

   DRUK OP EEN TOETS
```

HIGH-RES (791)

POKE 791 gives the number of characters to be combined to form one character.
first NIBBLE gives number of vertical characters
second NIBBLE gives number of horizontal characters.

```
POKE 791 GEEFT HET
AANTAL MATRIXEN DIE
SAMEN EEN KARAKTER
VORMEN. HET EERSTE
GETAL GEEFT AANTAL
MATRIXEN VERTIKAAL
HET TWEEDE GETAL
IS HET TOTAAL AANTAL
(MIN. #11    MAX.#AA)
#11=1 HOOG 1/1 BREED
#24=2 HOOG 4/2 BREED
#15=1 HOOG 5/1 BREED

   DRUK OP EEN TOETS
```

SFGT TABLE - CREATOR

1/ Creation of new character
   a: input symbol/character with :
      - alpha-key (from keyboard) or
      - ASCII-value (32 TO 122)

2/ Edit or copy character
   a: input symbol (from keyboard or ASCII-value)
   b: space
   C: input value of copy-character

3/ List Matrix
   a: LIST
   b: car ret

4/ Change Table
   a: car ret
   b: give symbol +copy-table + car ret

5/ End
   a: input symbol-character
   b: car ret

6/ letter A-I : line-choice (also with cursor up/down)
   number 1-8 : column

7/ special Edit-commands
   S : image
   K : inverse color
   O : upside-down
   W : clear screen
   L : list matrix-contents
   ? : list menu & commands
   CR: dump matrix in memory
   SHIFT + cursor up/down/left/right :
   move character 1 dot

Type LOAD : RUN (Table-Creator is saved with Bootstrap Loader)

After 2 pages of information:

- Geef symbol-Table en eventueel copy-Table (00 tot 99) -
  Give symbol-Table and possible copy-Table (00 - 99) -

In the standard Table-Creator program, Table 0 is write-protected, so we can not enter 0 .
Enter the number of the table you want to create e.g. 0
If you want to take information from another table enter a second number from 0 - 9 . e.g. : 10. (create table 1 , take info from 0).
type car ret.

- Geef symbol-karakter en eventueel copy-karakter ?
  Enter symbol you want to create, followed by space + other character if you want to take info from other character.
  e.g. : A - 0
  or : 100 - 65

(one can enter characters from the keyboard or with ASCII-values)

If you enter A 0 (+ car ret) character A will be created in table 1, information from letter 0 from table 0 will be given to start with.

SPECIAL EDIT-commands :

S : inverse image
K : inverse color
O : upside-down
W : clear screen
L : list matrix contents of actual table
? : list menu + commands
CR: dump matrix of actual character in table
SHIFT + cursor up/down/left/right : move character 1 dot.
letter A - I : line to act upon (also cursor up/down)
number 1 - 8 : set reset dot on blinking line.
to change table : car ret
give symbol + copy-table + car ret

p.s. The tables can be write-protected with a value on adress 792
e.g. POKE 792, 2 means write-protect table 0 - 2.
Protection is done in the table-creator program on line 12.

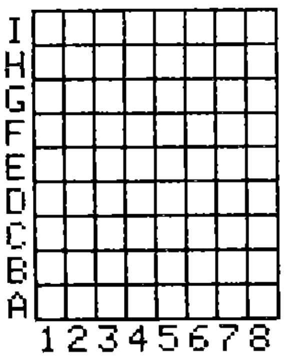
SGFT TABLE-CREATOR

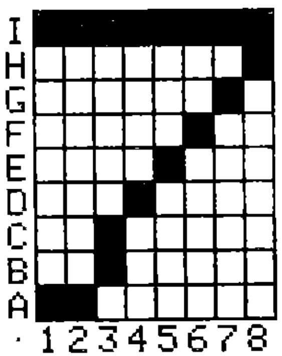
1: NIEUW KARAKTER VORMEN
   a: INPUT SYMBOL-KARAKTER D.M.V.
      ofwel EEN ALFA-TEKEN (KEY-BORD)
      ofwel DE ASCII-WAARDE (VANAF 032 TOT 122)
   b: CARIAGE-RETURN (CR)
2: WIJZIGEN en/of COPIEREN VAN EEN KARAKTER
   a: INPUT SYBOL-KARAKTER D.M.V.
      EEN ALFA-TEKEN of EEN ASCII-WAARDE
   b: SPATIE
   c: INPUT COPY-KARAKTER ZOALS NIEUW KARAKTER
3: LIST TEKENSET
   a: LIST
   b: CR
4: WISSELEN TABLE
   a: CR
   b: GEEF SYMBOL en COPY-TABLE + (·
5: EINDE WERK
   a: END ALS SYMBOL-KARAKTER INTYPEN
   b: CR

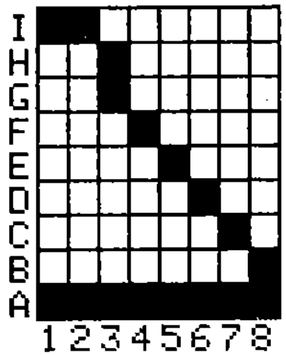
6: LETTER A tot I : LIJN WAAROP DOTS MOETEN KOMEN
   (OOK MET CURSOR OP/NEER TE KIEZEN)
   CIJFER 1 tot 8 : SET of RESET DOTNR. OP PINK-LIJN

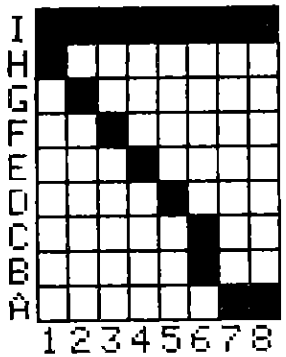
7: S : SPIEGELBEELD
   K : KLEUR INVERSEREN
   O : OMGEKEERD BEELD
   W : WIS SCHERM
   L : LIST TEKENSET
   M : MENU
   ? : LIST DE MENU DIE U NU ZIET
   CR : DUMP MATRIX IN UTILITY PROGRAMMA

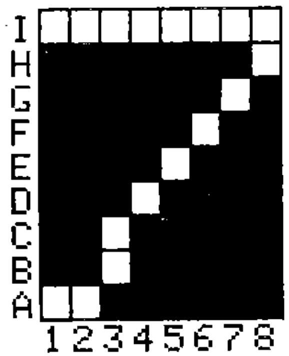
8: SHIFT EN CURSOR OP/NEER/LINKS/RECHTS
   VERSCHUIFT HET BEELD 1 DOT
   (ALLE DOTS BLIJVEN BEWAARD !)
   CURSOR LINKS/RECHTS : VERSCHUIFT DE PINK-LIJN 1 DOT











SFGT

FGT - SFGT translator

1/ LOAD FGT-table you want to convert.
(only machinelanguage part)

2/ LOAD & RUN SFGT translator FGT-part

all the characters will be displayed on screen.

3/ choose with cursor-keys which info to take from screen
and assign to new characters in SFGT.

for 16 x 16 matrixes, SFGT will take 2 x 2 characters.
2 width in following tables.

SFGT will accept characters from ASCII 32 to ASCII 122

```
10    REM UITLEG POKES SFGT LAMBRECHT ANDRE LEBBEKE 18/04/83
20    CLEAR 1000:DIM A$(10):DIM A%(10):FOR A%=768 TO 791:POKE A%,0:NEXT
30    REM TITEL
40    POKE 791,#11:A$=" S F G T ":B$="  MANUAL ":C$=" KLAAR ? "
50    MODE 2:COLORG 15 10 3 1:POKE 785,12:POKE 770,50:POKE 771,8:POKE 782,9
60    POKE 778,XMAX:POKE 780,YMAX:POKE 786,#31:CALLM 800,A$:POKE 786,#20
70    POKE 770,30:CALLM 800,B$:POKE 768,0:POKE 770,10:POKE 786,#13:CALLM 80
0,C$
80    G%=GETC:IF G%=0 THEN 80
100   REM HORIZONTALE POSITIE = POKE 768 EN 769
110   A$(0)="POKE 768 + 769 GEVENHORIZONTALE POSITIE V/D STRING AAN.     ":
A%(0)=#31
120   A$(1)="MAX: MODE 1 + 2 = 72     MODE 3 + 4 =160     MODE 5 + 6 =336":
A%(1)=#30
130   A$(2)="IN MODE 1-4 D.M.V.: POKE768,POS.        POKE769,0           ":
A%(2)=#12
140   A$(3)="IN MODE 5-6 D.M.V.: POKE768,POS. MOD 256POKE769,POS./256    ":
A%(3)=#13
150   T%=1:TEL%=3:GOSUB 2000:C$="POKE 768,":D$="POKE769=0 (MODE 4)"
160   POKE 785,12:POKE 786,#13:POKE 768,0:POKE 770,70:CALLM 800,D$
170   POKE 786,#30:POKE 770,100:FOR A%=10 TO 40:POKE 768,A%
180   B$=C$+MID$(STR$(A%),1,2):CALLM 800,B$:WAIT TIME 10:NEXT:GOTO 2100
200   REM VERTIKALE POSITIE = POKE 770
210   A$(0)=" POKE 770 GEEFT DE   VERTIKALE POSITIE  ":A%(0)=#31
220   A$(1)="MAX: MODE 1 -2 = 65      MODE 1A-2A= 52 ":A%(1)=#13
230   A$(2)="     MODE 3 -4 =130      MODE 3A-4A=105 ":A%(2)=#23
240   A$(3)="     MODE 5 -6 =255      MODE 5A-6A=211 ":A%(3)=#3
250   A$(4)=" TE VERMINDEREN MET  DE MATRIXHOOGTE    ":A%(4)=#30
260   T%=2:TEL%=4:GOSUB 2000:A$="POKE 770,":POKE 786,#30:POKE 768,20:POKE 7
85,64+12
270   FOR A% [illegible] STEP -1:C$=A$+MID$(STR$(A%),1,2):POKE 770,A%:CALLM 80
0,C$
280   WAIT TIME [illegible] GOTO 2100
300   REM HORIZONTALE STAP = POKE 771
310   A$(0)=" POKE 771 GEEFT DE   HORIZONTALE AFSTAND TUSSEN 2 KARAKTERS ":
A%(0)=#31
320   A$(1)=SPC(40):A%(1)=0:A$(2)=" MAX: 0 TOT 255           8=NORMALE STAP
":A%(2)=#27
330   POKE 768,0:POKE 770,120:POKE 785,64+2:B$=SPC(11)
340   T%=3:TEL%=2:GOSUB 2000:A$="POKE 771,":POKE 768,0:POKE 770,50:POKE 785
,12:POKE 786,#30
350   FOR A%=6 TO 15:C$=A$+MID$(STR$(A%),1,2):CALLM 800,B$
360   POKE 771,A%:CALLM 800,C$:WAIT TIME 20:NEXT:GOTO 2100
400   REM VERTIKALE STAP = POKE 772
410   A$(0)=" POKE 772 GEEFT DE   VERTIKALE AFSTAND   TUSSEN 2 KARAKTERS ":
A%(0)=#31
420   A$(1)=SPC(40):A%(1)=0:A$(2)=" MAX: 0 TOT 255     ":A%(2)=#23
430   A$(3)="      0=HORIZONTAAL       9=VERTIKAAL    ":A%(3)=#13
440   B$=SPC(11):POKE 768,0:POKE 770,120:POKE 785,64+2
450   T%=4:TEL%=3:GOSUB 2000:A$="POKE772,":POKE 768,20:POKE 770,30:POKE 785
,12:POKE 78[illegible]
460   FOR A[illegible] TO 9:C$=A$+MID$(STR$(A%),1,1):CALLM 800,B$
470   POKE 772,A%:CALLM 800,C$:WAIT TIME 20:NEXT:GOTO 2100
500   REM TABULATIE STAP = POKE 773
510   A$(0)=" POKE 773 GEEFT DE   HORIZONTALE STAP    BIJ  VERTIKALE CR  ":
A%(0)=#31
520   A$(1)=SPC(40):A%(1)=0:A$(2)=" MAX: 0 TOT 255     ":A%(2)=#23
530   A$(3)="      8 = NORMAAL    ":A%(3)=#13
540   T%=5:TEL%=3:GOSUB 2000:A$="POKE 773 = ":B$="SFGTDEMO ":FOR A%=4 TO 10
550   MODE 4:MODE 4:POKE 768,10:POKE 770,20:POKE 771,8:POKE 772,0:POKE 777,
0:POKE 780,120
560   POKE 785,2:POKE 786,#13:POKE 773,A%:C$=A$+MID$(STR$(A%),1,2):CALLM 80
0,C$
570   POKE 768,10:POKE 770,110:POKE 771,0:POKE 772,8:POKE 777,31:FOR B%=0 T
```

```
580     CALLM 800,B$:NEXT:WAIT TIME 50:NEXT:GOTO 2100
600   REM LIJN STAP = POKE 774
610   A$(0)=" POKE 774 GEEFT DE   VERTIKALE STAP      BIJ HORIZONTALE CR ":
A%(0)=#32
620   A$(1)=SPC(40):A%(1)=0:A$(2)=" MAX: 0 TOT 255     ":A%(2)=#23
630   A$(3)="      9 = NORMAAL   ":A%(3)=#13
640   T%=6:TEL%=3:GOSUB 2000:A$="POKE774 = ":B$="SFGTDEMO ":FOR A%=4 TO 12:
MODE 4:MODE 4
650   POKE 768,10:POKE 770,20:POKE 771,8:POKE 772,0:POKE 775,8:POKE 778,112
:POKE 785,2
660   POKE 786,#13:POKE 774,A%:C$=A$+MID$(STR$(A%),1,2):CALLM 800,C$:POKE 7
68,10:POKE 770,120
670   FOR B%=0 TO 10:CALLM 800,B$:NEXT:WAIT TIME 50:NEXT:GOTO 2100
700   REM HOR+VER MIN/MAX = POKE 775 TOT 780
710   A$(0)="POKE 775 TOT 780 IS DE SCHERMBEGRENZING ":A%(0)=#31
720   A$(1)=" HOR.MIN = 775/776   HOR.MAX = 778/779  ":A%(1)=#23
730   A$(2)=" VER.MIN = 777       VER.MAX = 780      ":A%(2)=#23
740   A$(3)="MAX:IDEM ALS 768+770":A%(3)=#2
750   A$(4)="N.B. MIN EN MAX     WORDT AUTOMATISCH   VERWISSELD MET ZIN   (
ZIE LATER...)     ":A%(4)=#13
755   T%=7:TEL%=4:GOSUB 2000
760   A$="DIT IS EEN DEMO VOOR HORIZONTALEBEGRENZING.....POKE 775 = 10.. P
OKE 776 =  0...POKE 778 =138...POKE 779 =  0..."
770   POKE 768,10:POKE 770,100:POKE 774,9:POKE 775,10:POKE 778,138
780   POKE 785,2:POKE 786,#23:CALLM 800,A$:A$="10":B$="138":POKE 770,34:POK
E 778,XMAX
790   POKE 786,#2:CALLM 800,A$:POKE 768,138:CALLM 800,B$:GOSUB 2040
800   REM VERTIKAAL MIN + MAX = POKE 777 EN 780
810   A$="DIT IS EEN DEMO VOOR VERTIKALE BEGRENZING   POKE 777 =12  POKE 78
0=129"
820   POKE 768,10:POKE 770,111:POKE 771,0:POKE 772,9:POKE 773,9:POKE 777,12
:POKE 780,129
830   POKE 785,2:POKE 786,#32:CALLM 800,A$:A$="12":B$="129":POKE 768,80:POK
E 770,12
840   POKE 771,8:POKE 772,0:POKE 785,4:POKE 786,#23:CALLM 800,A$
850   POKE 780,YMAX:POKE 770,119:CALLM 800,B$:GOTO 2100
900   REM MATRIX BEGIN+EINDE = POKE 781 EN 782
910   A$(0)="POKE 781 EN 782 IS  HET MATRIX BEGIN EN HET MATRIX EINDE     ":
A%(0)=#32
920   A$(1)="NORMAAL:POKE 781 = 0        POKE 782 = 9":A%(1)=#20
930   T%=8:TEL%=1:GOSUB 2000:A$="SFGT MATRIX DEMO":B$="781=":C$="   782="
940   FOR B%=0 TO 2:POKE 768,10:POKE 785,4:FOR A%=0 TO 18
950   IF B%=0 THEN C%=0:D%=A%
955   IF B%=1 THEN C%=A%:D%=18
960   IF B%=2 THEN C%=A%:D%=18-A%:WAIT TIME 5
970   POKE 781,C%:POKE 782,D%:POKE 770,60:POKE 786,#20:CALLM 800,A$
980   POKE 781,0:POKE 782,9:D$=B$+MID$(STR$(C%),1,2)+C$+MID$(STR$(D%),1,2)
990   POKE 770,30:POKE 786,#13:CALLM 800,D$:NEXT:GOSUB 2040:NEXT:GOTO 2100
1000  REM STRING BEGIN+EINDE = POKE 783 EN 784
1010  A$(0)="POKE 783 EN 784 IS  HET STRINGBEGIN EN   DE STRINGLENGTE     ":
A%(0)=#31
1020  A$(1)="ALS 784 =0 DAN HEEFTDE STRING ZIJN      VOLLEDIGE LENGTE     ":
A%(1)=#13
1030  T%=9:TEL%=1:GOSUB 2000:A$="MIDSTRINGTEST":B$="783=":C$="   784="
1040  FOR B%=0 TO 2:POKE 768,10:POKE 785,4:FOR A%=0 TO 10
1050  IF B%=0 THEN C%=0:D%=0:E%=0
1055  IF B%=1 THEN C%=A%:D%=0:E%=40
1060  IF B%=2 THEN C%=A%:D%=3:E%=60
1070  POKE 783,C%:POKE 784,D%:POKE 770,60:POKE 786,#20:E$=A$+" ":CALLM 800,
E$
1080  POKE 783,0:POKE 784,0:D$=B$+MID$(STR$(C%),1,2)+C$+MID$(STR$(D%),1,2)
1090  POKE 770,30:POKE 786,#13:CALLM 800,D$:WAIT TIME E%:NEXT:GOSUB 2040:NE
XT:GOTO 2100
1100  REM ZINFLAG = POKE 785
1105  A%(0)=#31:A$(0)=" POKE 785 BEVAT DE    SCHRIJFFUNCTIES   "
1115  A%(2)=#13:A$(2)="  2 : RECHTS/NEER     3 : LINKS/NEER     "
1120  A%(3)=#32:A$(3)="  4 : BEHOUD HOR.POS  8 : BEHOUD VER.POS"
1125  A%(4)=#20:A$(4)=" 16 : ONDERSTE BOVEN 64 : HOGE SNELHEID "
1130  A%(5)=#21:A$(5)="128 : INKEY          ":T%=10:TEL%=5:GOSUB 2000
1135  A%(0)=#31:A$(0)="VB.:U WILT LINKS/OP + BEHOUD HOR.POS.   + HOGE SNELH
EID DUS POKE 785 =1+4+64=69 "
1140  A%(1)=#23:A$(1)="VB.:U WILT RECHTS/OP+ BEHOUD HOR.POS.   + BEHOUD VER
.POS.DUSPOKE 785 =0+4+8=12  "
1145  A%(2)=#12:A$(2)="U KUNT DUS DOOR COM-BINEREN VAN DE BITS ALLE MOGELIJ
KHEDEN  BEREIKEN.           "
1150  TEL%=2:GOSUB 2000
1155  A$=" POKE 785 = ":B$=" TEST ZINFLAG 0-3 ":BEG%=0:EIND%=3:STAP%=1:GOSU
B 1270
1160  B$=" TEST  POSITIEFLAG 4-8  ":BEG%=4:EIND%=12:STAP%=4:GOSUB 1270
1165  B$=" TEST  OMKEERFLAG 16  ":BEG%=16:EIND%=19:STAP%=1:GOSUB 1270
1170  B$=" TEST  HOGE SNELHEID 64 TEST HOGE SNELHEID 64  "
1175  BEG%=0:EIND%=64:STAP%=64:GOSUB 1270
1180  A%(0)=#31:A$(0)="VOOR DE INKEYSTRING MOET POKE 785 >=128 "
1185  A%(1)=#13:A$(1)="U ROEPT DEZELFDE ROUTINE CALLM800,.$ AAN"
1190  A%(2)=#13:A$(2)="EN NU KUNT U EEN    WOORD INTYPEN . ALLE"
1195  A%(3)=#13:A$(3)="MOGELIJKHEDEN ZOALS LENSTRING -MIDSTRINGBLIJVEN BEHO
UDEN.   "
1200  A%(4)=#2:A$(4)="VB.:A$ = DAINAMIC     783=2 : 784= 5    "
1205  A%(5)=#2:A$(5)="U KUNT NU 5 LETTERS INTYPEN OP INAMI    ":TEL%=5:GOSU
B 2000
1210  A$="DAINAMIC":FOR INKEY%=0 TO 3:B$="   A$="+A$+"      TYP NU 5 LETTER
S IN "
1220  POKE 768,0:POKE 770,100:POKE 786,#31:POKE 785,6:CALLM 800,B$:POKE 770
,60
1230  POKE 786,#23:POKE 783,2:POKE 784,5:POKE 785,6+128:CALLM 800,A$
1240  B$="DE NIEUWE STRING IS:"+A$:POKE 770,30:POKE 783,0:POKE 784,0:POKE 7
85,6
1250  POKE 786,#13:CALLM 800,B$:GOSUB 2040:NEXT:GOTO 2100
1270  FOR A%=BEG% TO EIND% STEP STAP%:POKE 768,30:POKE 770,20:POKE 786,#31:
POKE 785,0
1280  POKE 777,30:C$=A$+MID$(STR$(A%),1,2):CALLM 800,C$:POKE 768,0:POKE 770
,60
1290  POKE 785,A%:POKE 786,#23:FOR B%=0 TO 30:CALLM 800,B$:NEXT:GOSUB 2040:
NEXT:RETURN
1300  REM COLOR = POKE 786
1310  A%(0)=#31:A$(0)="POKE 786       DE  KLEUR VAN DE STRING "
1320  A%(1)=#32:A$(1)="EERST DE VOORGRONDKLEUR EN DAN DE BACKGROUND"
1330  A%(2)=#23:A$(2)="MAX:4-COLOR  #00/#33   16-COLOR  #00/#FF"
1340  T%=11:TEL%=2:GOSUB 2000:A$="COLORTEST MODE 3":B$="POKE 786=#"
1350  POKE 768,10:POKE 785,4:MODE 3:FOR A%=0 TO 10:B%=RND(255)
1360  C$=B$+HEX$(B%):POKE 770,60:POKE 786,B%:CALLM 800,A$
1370  POKE 770,30:POKE 786,#1F:CALLM 800,C$:WAIT TIME 80:NEXT
1380  GOSUB 2040:POKE 768,10:POKE 785,4:MODE 4:A$="COLORTEST MODE 4"
1385  FOR A%=0 TO 3:FOR B%=0 TO 3:B$="POKE 786,#":IF A%=0 THEN B$="POKE 786
,#0"
1390  C%=A%*16+B%:C$=B$+HEX$(C%):POKE 770,60:POKE 786,C%:CALLM 800,A$
1395  POKE 770,30:POKE 786,#31:CALLM 800,C$:WAIT TIME 60:NEXT:NEXT:GOTO 210
0
1400  REM DELAY = POKE 787
1410  A%(0)=#31:A$(0)="POKE 787 GEEFT EEN  VERTRAGING BIJ HET  PRINTEN V.D.
 STRING "
1420  A%(1)=#23:A$(1)="MAX : 255          ":T%=12:TEL%=1:GOSUB 2000
1430  A$="POKE 787 =":POKE 768,10:POKE 770,60:POKE 785,4:POKE 786,#31
1440  FOR A%=0 TO 80 STEP 20:MODE 4:POKE 787,A%:B$=A$+MID$(STR$(A%),1,2)
1450  CALLM 800,B$:WAIT TIME 40:NEXT:GOTO 2100
1500  REM ANIMATIE = POKE 788 EN 789
1510  A%(0)=#31:A$(0)="788 EN 789 GEVEN DE MOGELIJKHEID VAN    ANIMATIE ZON
DER FLIKKEREND BEELD ...    "
1520  A%(1)=#13:A$(1)="788 GEEFT HET AANTALKARAKTERS PER BEELD (0=GEEN ANIM
ATIE )  "
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1525  A%(2)=#2:A$(2)="789 GEEFT DE HORSTAPPER KARAKTER          "
1530  A%(3)=#30:A$(3)="771 GEEFT DE HORSTAPPER BEELD AAN        ":T%=13:TEL%
=3:GOSUB 2000
1535  A%(0)=#12:A$(0)="VOLGORDE ANIMATIE:  ":A%(1)=#31:A$(1)="1E BEELD , DA
N DELAY"
1540  A%(2)=#31:A$(2)="2E BEELD OP ZELFDE  POSITIE+3E BEELD OP "
1545  A%(3)=#31:A$(3)="NIEUWE POSITIE ENZ. ":TEL%=3:GOSUB 2000
1550  A$=" 771=8:787=255:789=8 788=":B$="1234567890":D$="VB.:B$="+B$
1560  FOR A%=0 TO 5:POKE 768,0:POKE 770,100:POKE 771,8:POKE 785,2:POKE 786,
#32
1570  CALLM 800,D$:POKE 768,0:POKE 770,30:POKE 786,#13:POKE 788,0:C$=A$+HEX
$(A%)
1580  CALLM 800,C$:POKE 786,#30:POKE 787,255:POKE 768,0:POKE 770,60:POKE 78
8,A%
1590  POKE 789,8:CALLM 800,B$:GOSUB 2040:MODE 4:NEXT:GOTO 2100
1600  REM TABEL = POKE 790
1610  A%(0)=#13:A$(0)="POKE 790 GEEFT DE   TABELKEUZE           "
1620  A%(1)=#20:A$(1)="AANGEZIEN DE ANDERE TABELLEN NOG NIET   GECREERD ZIJ
N IS ER GEEN DEMO VOORZIEN  "
1630  A%(2)=#31:A$(2)="STANDAARDTABEL = 0  MAX : 0 TOT 9        ":T%=14:TEL%
=2:GOSUB 2000:GOTO 2100
1700  REM TOTAAL MATRIX=POKE 791
1710  A%(0)=#13:A$(0)="POKE 791 GEEFT HET  AANTAL MATRIXEN DIE "
1720  A%(1)=#13:A$(1)="SAMEN EEN KARAKTER  VORMEN. HET EERSTE  "
1730  A%(2)=#13:A$(2)="GETAL GEEFT AANTAL  MATRIXEN VERTIKAAL. "
1740  A%(3)=#13:A$(3)="HET TWEEDE GETAL    IS HET TOTAAL AANTAL"
1750  A%(4)=#31:A$(4)="(MIN. #11   MAX.#AA)"
1760  A%(5)=#23:A$(5)="#11=1 HOOG 1/1 BREED"
1770  A%(6)=#23:A$(6)="#24=2 HOOG 4/2 BREED"
1780  A%(7)=#23:A$(7)="#15=1 HOOG 5/1 BREED"
1790  T%=15:TEL%=7:GOSUB 2000:GOTO 2100
1800  REM DEMO
1900  END
2000  MODE 4:MODE 4:POKE 768,0:POKE 770,120:POKE 771,8:POKE 772,0:POKE 774,
9:POKE 775,0
2010  POKE 777,0:POKE 778,160:POKE 779,XMAX/256:POKE 780,YMAX:POKE 781,0:PO
KE 782,9
2020  POKE 783,0:POKE 784,0:POKE 785,64+2:POKE 787,0:POKE 788,0:COLORG 1 3
10 15
2030  FOR A%=0 TO TEL%:POKE 786,A%(A%):CALLM 800,A$(A%):NEXT
2040  POKE 768,0:POKE 770,1:POKE 771,8:POKE 772,0:POKE 775,0:POKE 777,0:POK
E 778,160
2050  POKE 780,YMAX:POKE 781,0:POKE 782,9:POKE 783,0:POKE 784,0:POKE 785,0:
POKE 786,#31
2060  POKE 787,0:POKE 788,0
2070  GET$="  DRUK OP EEN TOETS ":CALLM 800,GET$
2080  G%=GETC:IF G%=0 THEN 2080:MODE 4:MODE 4:RETURN
2100  POKE 768,0:POKE 770,1:POKE 771,8:POKE 772,0:POKE 775,0:POKE 777,0:POK
E 778,160
2110  POKE 780,YMAX:POKE 781,0:POKE 782,9:POKE 783,0:POKE 784,0:POKE 785,0:
POKE 786,#31
2120  POKE 787,0:POKE 788,0
2130  GET$=" DRUK UP-DOWN OF A-O":CALLM 800,GET$
2140  G%=GETC:IF G%=0 THEN 2140
2150  IF G%=17 AND T%>1 THEN T%=T%-1:GOTO 2180
2160  IF G%=16 THEN T%=T%+1:GOTO 2180
2170  IF G%>64 AND G%<80 THEN T%=G%-64:GOTO 2180
2175  GOTO 2140
2180  MODE 4:MODE 4:ON T% GOTO 100,200,300,400,500,600,700,900,1000
2190  ON T%-9 GOTO 1100,1300,1400,1500,1600,1700,1900
*LOAD:RUN
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1     REM SFGT DEMO LAMBRECHT ANDRE LEBBEKE 11/3/83
2     REM POKES: 768=HORBEG1;769=HORBEG2;770=VERBEG;771=HORSTEP;772=VERSTEP
;773=TABSTEP
3     REM 774=LINSTEP;775=HORMIN1;776=HORMIN2;777=VERMIN;778=HORMAX1;779=HO
RMAX2
4     REM 780=VERMAX;781=MATRIXBEG;782=MATRIXLEN;783=STRINGBEG;784=STRINGLE
N;785=RICHTING
5     REM 786=COLOR (FRONT/BACK HEX);787=DELAYTIME;788=ANIMATIE;789=ANIMATI
ESTEP;790=TABLE-NR
6     REM 785:0=RIGHT UP;1=LEFT UP;2=RIGHT DOWN;3=LEFT DOWN;4=HORBEG FIX;8=
VERBEG FIX
7     REM 64=DUBBEL SPEED;128=INKEY NAAR AANGEROEPEN STRING
8     REM 791=MATRIX CONSTRUCTIE
10    CLEAR 1000:DIM A$(23):DIM A(10):ENVELOPE 0 15:ENVELOPE 1 15
20    POKE 791,#11:COLORG 1 3 11 15:MODE 3:MODE 4
30    A$="  SFGT TEST DEMO   ":POKE 770,20:POKE 771,8:POKE 772,0:POKE 773,0
:POKE 774,0
40    POKE 775,0:POKE 777,0:POKE 778,XMAX:POKE 780,YMAX:POKE 781,0:POKE 782
,8
50    POKE 783,0:POKE 785,0:POKE 786,#30:POKE 787,0:POKE 788,0:POKE 790,0
60    FOR A=152 TO 8 STEP -2:POKE 768,A:POKE 784,20-A/8:CALLM 800,A$:SOUND
1 0 15 2 FREQ(A*10):NEXT
70    POKE 768,8:POKE 785,64+4:FOR A=20 TO 100:POKE 770,A:CALLM 800,A$:SOUN
D 1 0 15 2 FREQ(A*10)
75    SOUND 1 0 15 2 FREQ(A*40):NEXT:SOUND OFF
80    POKE 785,12:POKE 774,0:POKE 775,16:FOR B=0 TO 5
90    FOR A=16 TO XMAX STEP 8:POKE 768,A:CALLM 800,A$:WAIT TIME 3:NEXT:NEXT
100   POKE 768,16:POKE 783,0:POKE 784,0:C$="TONGELSBOS  1983":B$=SPC(16):C=
2:D=1:FOR B=1 TO 10
110   POKE 770,C:POKE 785,64+28-16*D:POKE 786,#13:FOR A=1 TO 9:POKE 782,A:C
ALLM 800,C$:NEXT
120   POKE 786,#30:FOR A=1 TO 9:POKE 782,A:CALLM 800,B$:NEXT
130   C=C+8:D=1-D:NEXT:POKE 786,#13:POKE 770,C:POKE 785,64+12:FOR A=1 TO 9:
POKE 782,A:CALLM 800,C$:NEXT
200   B=0:E$="COMPUTER":D$=" acegi ODQRNM"+CHR$(64)+"K ":F$="WAT DENK JE ER
VAN?":POKE 786,#31
210   A$(0)="  MATRIX TESTEN.. ":A$(1)=" MET CALLM800,A$  ":A$(2)=" WACHT N
OG EVEN..":A$(3)="   DAT IS HET '  "
220   POKE 781,0:POKE 782,18:POKE 768,16:POKE 770,50:POKE 785,64+12:FOR A=0
 TO 234:IF A<19 THEN POKE 782,A
230   IF A<>30 AND A<>100 AND A<>170 AND A<>234 THEN 260
240   POKE 768,8:POKE 770,35:POKE 782,9:POKE 781,0:POKE 786,#3:CALLM 800,A$
(B)
250   B=B+1:POKE 768,16:POKE 770,50:POKE 782,18:POKE 786,#31
260   POKE 781,234-A:CALLM 800,D$:NEXT:POKE 768,72:POKE 782,9:CALLM 800,E$
300   POKE 785,12:POKE 786,#20:POKE 770,2:POKE 774,9:POKE 787,0:F$="WRITTEN
 BY LAMBRECHT":I$=" k":H$=" m"
310   FOR A=0 TO 19:POKE 781,0:POKE 782,9:G$=" k  l"+MID$(F$,19-A,1):IF G$=
" k  l " THEN 360
320   FOR B=0 TO 136-A*7 STEP 7:POKE 768,B:POKE 775,B:POKE 778,B+24:CALLM 8
00,G$
330   SOUND 1 0 15 0 FREQ(40):SOUND OFF :WAIT TIME 2:CALLM 800,H$
340   SOUND 1 0 15 0 FREQ(50):SOUND OFF :WAIT TIME 2:NEXT
350   FOR B=18 TO 0 STEP -1:POKE 782,B:POKE 781,18-B:CALLM 800,I$:NEXT
360   NEXT
400   POKE 778,XMAX:POKE 768,16:POKE 771,7:POKE 774,0:C=0:D=3:E=0:H=0:FOR B
=1 TO 20
410   FOR G=0 TO 1:POKE 785,12+16*H:F=1+(-2*E):FOR A=C TO D STEP F:POKE 781
,5+A
420   POKE 782,4-A:POKE 770,16-(5-A)*H:CALLM 800,F$:POKE 770,11+A+(5-A)*H:P
OKE 781,0:CALLM 800,F$:NEXT
430   C=3-C:D=3-D:E=1-E:H=1-H:NEXT:H=1-H:NEXT
440   WAIT TIME 100:FOR A=1 TO 10:COLORG A A+3 11-A 16-A:WAIT TIME 100:NEXT
450   COLORG 1 3 11 15
500   A$(0)="DEZE TEKST WORDT METSFGT GESCHREVEN.    ":A(0)=#7F
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510   A$(1)="DE SNELHEID IS ONGE-VEER 300 KARAKT/SEC.":A(1)=#2E
520   A$(2)="SCHERMBEGRENZING     INKEY       COLORS    ":A(2)=#48
530   A$(3)="ANIMATIETEKENEN      MID$        LEN$      ":A(3)=#D3
540   A$(4)="MATRIXBEGIN + HOOGTEDELAYTIME  ENZ. ENZ.":A(4)=#F0
550   A$(5)="    SOFTWARE LAMBRECHT HENRI EN ANDRE      ":A(5)=#D1
560   FOR D=1 TO 5:POKE 768,0:POKE 769,0:POKE 770,120:POKE 785,64+6:POKE 78
1,0:POKE 782,9:POKE 771,8:POKE 772,0
570   POKE 773,1:POKE 774,12:POKE 783,0:POKE 784,0:POKE 775,0:POKE 776,0:PO
KE 778,160:POKE 779,0:POKE 788,0
580   MODE 3:FOR A=0 TO 4:POKE 786,A(A):CALLM 800,A$(A):NEXT
600   WAIT TIME 300:POKE 768,0:POKE 769,0:POKE 785,64+2:POKE 775,0:POKE 778
,80:POKE 779,1:POKE 780,255:POKE 770,245
610   MODE 5:FOR B=0 TO 1:POKE 784,20:FOR A=0 TO 4:POKE 786,A(A):POKE 783,0
620   CALLM 800,A$(A):POKE 768,176:POKE 769,0:CALLM 800,A$(A):POKE 783,20
630   CALLM 800,A$(A):POKE 768,176:POKE 769,0:CALLM 800,A$(A):NEXT:POKE 783
,0:POKE 784,0:POKE 786,A(A)
640   IF B=0 THEN CALLM 800,A$(A)
650   NEXT:WAIT TIME 300:NEXT
700   WAIT TIME 100:MODE 4:G$="op  qr":POKE 782,9:POKE 771,8:POKE 772,4
710   POKE 784,0:POKE 786,#F0:POKE 787,20:POKE 768,24:POKE 769,0
720   POKE 770,20:POKE 788,2:POKE 789,8:POKE 773,8:POKE 774,1:POKE 777,10
730   FOR A=1 TO 15:POKE 785,64+RND(3):FOR B=1 TO 15:CALLM 800,G$:SOUND 1 0
 15 0 FREQ(1000.0+RND(4000.0))
740   WAIT TIME 1:SOUND OFF :NEXT:NEXT
800   MODE 2:POKE 786,#31:POKE 768,24:POKE 769,0:POKE 770,30:POKE 771,8
810   POKE 772,0:POKE 773,0:A$=":":POKE 774,0:POKE 785,64+12:POKE 787,0
820   POKE 788,0:POKE 781,0:POKE 782,9:POKE 783,0:POKE 784,0:CALLM 800,A$
830   POKE 784,0:FOR SEC1=48 TO 53:FOR SEC2=48 TO 57:POKE 768,8:POKE 768,8
840   POKE 783,0:B$=CHR$(SEC1)+CHR$(SEC2):CALLM 800,B$:SOUND OFF :POKE 768,
32
850   FOR TIEN=0 TO 51:READ C$:CALLM 800,C$:NEXT:RESTORE
860   SOUND 1 0 15 0 FREQ(1000):NEXT:NEXT
870   WAIT TIME 100:SOUND OFF :GOTO 900
880   DATA 00,02,04,06,08,10,12,14,16,18,20,22,24,26,28,30
890   DATA 32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,63
895   DATA 64,66,68,70,72,74,76,78,80,82,84,86,88,90,92,94,96,98,99
900   DIM A$(23):MODE 3:COLORG 15 3 1 10:MODE 4
902   A$(0)="768 = HOR.POSITIE    ":A$(1)="769 = HOR.POS. 0-1  ":A$(2)="770
= VERT.POSITIE  "
905   A$(3)="771 = HORIZ. STAP    ":A$(4)="772 = VERTIK. STAP  ":A$(5)="773
= TABULATIESTAP "
910   A$(6)="774 = LIJN STAP      ":A$(7)="775 = HORIZ. MIN    ":A$(8)="776
= HORIZ.MIN 0-1 "
915   A$(9)="777 = VERTIK. MIN    ":A$(10)="778 = HORIZ. MAX    ":A$(11)="77
9 = HORIZ. MAX 0-1"
916   A$(12)="780 = VERTIK. MAX   ":A$(13)="781 = MATRIX BEGIN  ":A$(14)="7
82 = MATRIX LENGTE "
920   A$(15)="783 = STRINGBEGIN   ":A$(16)="784 = STRINGLENGTE  ":A$(17)="7
85 = ZINFLAG       "
922   A$(18)="786 = COLOR FR/BACK ":A$(19)="787 = DELAYTIME     "
925   A$(20)="788 = ANIMATIEFLAG  ":A$(21)="789 = ANIMATIESTAP  ":A$(22)="7
90 = TABELNR. 0-9  "
926   A$(23)=" + CALLM800,..$     "
930   FOR TEL1=0 TO 3:A=1:B=0:POKE 778,XMAX:POKE 780,YMAX:POKE 785,64+4:POK
E 768,0
940   POKE 784,0:FOR TEL=0 TO 1:POKE 786,16+TEL*16:FOR Y=127 TO 9 STEP -2:P
OKE 770,Y
950   POKE 782,A:POKE 781,9-A:CALLM 800,A$(B):A=A+2:IF A>9 THEN B=B+1:A=1
960   NEXT:WAIT TIME 200:NEXT:WAIT TIME 200:NEXT
1000  GOTO 20
```