TALKING TURKEY

This program has decided that although the English language does not exist, some of its rules do.

Using these rules, the computer tries to invent English words, and manages to do so surprisingly often. Around seven per cent of the output of this program — written by Paul Holmes — should be real words. The ZX81 uses knowledge of the frequency of occurence of certain letters in words in English to dictate how often the letters are used in creating randomly generated words.

If you leave this program running for a million years it may well write the Gettysbury Address ('Three score and seven years ago our fathers founded . . .').

PROGRAM LISTING

```
  10 DIM A$(26,23)
  20 LET A$(1)="TNIRSHMGBCDFJKLP
QUAVUWXYZ"
  25 LET A$(2)="EAOIU"
  30 LET A$(3)="ETAOISHU"
  35 LET A$(4)=A$(3)
  40 LET A$(5)="ETANRSHMGBCDFJKL
PQUVUWXYZ"
  50 LET A$(6)=A$(2)
  60 LET A$(7)="EAOISHU"
  70 LET A$(8)=A$(2)
  80 LET A$(9)="TEONRSHMGBCDFJKL
PQUVUWXYZ"
  90 LET A$(10)=A$(2)
 100 LET A$(11)=A$(2)
 110 LET A$(12)=A$(2)
 120 LET A$(13)=A$(2)
 130 LET A$(14)=A$(2)
 140 LET A$(15)="TAONIRSHMGBCDFK
JLPQUVUWXYZ"
 150 LET A$(16)=A$(2)
 160 LET A$(17)="U"
 170 LET A$(18)=A$(2)
 180 LET A$(19)="EAOIHU"
 190 LET A$(20)=A$(2)
 200 LET A$(21)="AO"
 210 LET A$(22)=A$(2)
 220 LET A$(23)=A$(2)
 240 LET A$(24)=A$(2)
 250 LET A$(25)=A$(2)
 260 LET A$(26)=A$(2)
 265 LET L=INT (3+RND*INT (RND*4
+1))
 270 LET X=INT (RND*26+1)
 280 FOR I=1 TO L
 290 PRINT CHR$ (X+37);
 300 LET C=CODE A$(X,(INT (RND*I
NT (RND*23)+1)))
 310 IF C=0 THEN GOTO 300
 320 LET X=C-37
 330 NEXT I
 340 IF INKEY$="" THEN GOTO 340
 345 CLS
 350 GOTO 265
```

A 'poetry' version of the program:

```
   5 REM "POETRY" VERSION
  10 DIM A$(26,23)
  20 LET A$(1)="TNIRSHMGBCDFJKLP
QUAVUWXYZ"
  25 LET A$(2)="EAOIU"
  30 LET A$(3)="ETAOISHU"
  35 LET A$(4)=A$(3)
  40 LET A$(5)="ETANRSHMGBCDFJKL
PQUVUWXYZ"
  50 LET A$(6)=A$(2)
  60 LET A$(7)="EAOISHU"
  70 LET A$(8)=A$(2)
  80 LET A$(9)="TEONRSHMGBCDFJKL
PQUVUWXYZ"
  90 LET A$(10)=A$(2)
 100 LET A$(11)=A$(2)
 110 LET A$(12)=A$(2)
 120 LET A$(13)=A$(2)
 130 LET A$(14)=A$(2)
 140 LET A$(15)="TAONIRSHMGBCDFK
JLPQUVUWXYZ"
 150 LET A$(16)=A$(2)
 160 LET A$(17)="U"
 170 LET A$(18)=A$(2)
 180 LET A$(19)="EAOIHU"
 190 LET A$(20)=A$(2)
 200 LET A$(21)="AO"
 210 LET A$(22)=A$(2)
 220 LET A$(23)=A$(2)
 240 LET A$(24)=A$(2)
 250 LET A$(25)=A$(2)
 260 LET A$(26)=A$(2)
 262 FOR G=1 TO 100
 265 LET L=INT (3+RND*INT (RND*4
+1))
 270 LET X=INT (RND*26+1)
 275 SCROLL
 277 FOR H=1 TO RND*5+2
 280 FOR I=1 TO L
 290 PRINT CHR$ (X+37);
 300 LET C=CODE A$(X,(INT (RND*I
NT (RND*23)+1)))
 310 IF C=0 THEN GOTO 300
 320 LET X=C-37
 330 NEXT I
 332 IF L<5 THEN LET L=L+INT (RN
D*2)-INT (RND*2)
 335 PRINT " ";
 336 NEXT H
 337 IF RND>.8 THEN SCROLL
 340 NEXT G
 350 GOTO 262
```

Part of the output:

```
AIBO        YOP         AMA
DTEH        DEN         SUABA
TOO         LOT         DTAKA
UOTI        VEE         HACA
NEFAIT      NIT         MAT
REE         HUA         INAX
HUAH        RERA        XIO
BIE         TEGO        SOM
YINOR       PEAGH       SITE
YIE         WEF         LUOO
JEC         NUA         SEX
BATU        IEB         PIG
JIT         CET         ZEXE
RIH         NIO         ZOT
OGI         SAT         ZOGAN
RAC         UARIB       BED
IES         TEM         XAN
KITE        SHAG        FENE
LIO         KOR         BAUAN
BAHETA      HEMI        TAMA
KASITA      LUO         DTAC
LU                      HAC
```