

Morse Tutor (Model A)

This has to be the definitive Morse code tutor. It's got everything you could possibly require to painlessly acquaint yourself with the code, and then to go on and practice until you reach professional speeds. The program offers you a comprehensive menu with a full listing of letters and numbers (in both text and Morse), a facility to convert your own messages into the code and a challenging tester section. You also have the opportunity to adjust the speed of the code to suit your own abilities. What more could you ask for?

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1 REM *** BBC VERSION ***
2 REM *** MORSE TUTOR ***
10 REM Morse tutor @ Robert Erskine 1983
20 REM Converted to 16k BBC Micro by C.R.T
anner
30 ON ERROR GOTO 70
40 MODE 7:VDU 23;8202;0;0;0;
50 DIM c(36,5),c$(36)
60 GOSUB 1060
70 CLS:PRINT TAB(0,0);CHR$(141);CHR$(129);
"----- OPTIONS -----"CHR$(1
41);CHR$(131);"----- OPTIONS -----
-----"
80 PRINT "" Please choose one of the 6 op
tions."
90 PRINT 'CHR$(133);"          1.....Print a m
essage"
100 PRINT 'CHR$(133);"          2.....Message wi
th sound only"
110 PRINT 'CHR$(133);"          3.....Create you
r own message"
120 PRINT 'CHR$(133);"          4.....Test secti
on"
130 PRINT 'CHR$(133);"          5.....Change spe
ed"
140 PRINT 'CHR$(133);"          6.....The Morse
Code"
150 PRINT 'CHR$(133);"          7.....Leave the
program"

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160 PRINT ''' Which option do you require?
"
170 A=INKEY(1000):A=A-48:IF A<1 OR A>7 THEN
170 ELSE ON A GOTO 310,300,320,430,890,950,1
230
180 x$=v$:v$=q$+v$+h$
190 FOR x=1 TO LEN(v$)-38
200 IF O=0 THEN PRINT TAB(0,12);CHR$(141)
;MID$(v$,x,37)'CHR$(141);MID$(v$,x,37)
210 T=ASC(MID$(v$,x+36,1))
220 FOR y=1 TO 5
230 TIME=0
240 IF T>64 THEN IF c(T-64,y)<>0 THEN T
IME=-((c(T-64,y)*5)+2):SOUND 1,-15,100,c(T-64
,y):REPEAT UNTIL TIME>0
250 IF T<58 AND T>47 THEN IF c(T-21,y)<
>0 THEN TIME=-((c(T-21,y)*5)+2):SOUND 1,-15,1
00,c(T-21,y):REPEAT UNTIL TIME>0
260 NEXT y
270 TIME=0:REPEAT UNTIL TIME>20
280 NEXT x
290 GOTO 400
300 O=1:v$=f$:GOTO 180
310 CLS:v$=f$:O=0:GOTO 180
320 CLS:PRINT TAB(0,0);CHR$(141);CHR$(129);
"----- CREATE A MESSAGE -----"'CHR$(1
41);CHR$(131);"----- CREATE A MESSAGE ---
-----"
330 PRINT '" Enter your own message at the
bottom of the screen and then press the <RETUR
N> key.'''''''''
340 INPUT v$:IF LEN(v$)>200 THEN PRINT TAB(
6,24);CHR$(136);"THIS IS TOO LONG";:TIME=0:REP
EAT UNTIL TIME>300:GOTO 320
350 CLS:PRINT TAB(0,8);" Do you want the me
ssage displayed in both sound and vision? (
Y or N)"
360 TIME=0:REPEAT UNTIL TIME>200
370 IF INKEY(-86) THEN O=1:CLS:GOTO 180
380 IF INKEY(-69) THEN O=0:CLS:GOTO 180
390 GOTO 370
400 O=0
410 f$=x$
420 GOTO 70
430 CLS:PRINT TAB(0,0);CHR$(141);CHR$(129);

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"----- TEST SECTION -----"'CHR$(14
1);CHR$(131);"----- TEST SECTION -----
----"'
    440 PRINT " Do you want to be tested on cha
racters (1) code (2) or sound (3)?";
    450 A=INKEY(1000):A=A-48:IF A<1 OR A>3 THEN
GOTO 450 ELSE W=A
    460 PRINT TAB(0,3);" Do you want testing on
letters (1) or numbers (2)? "
;
    470 A=INKEY(1000):A=A-48:IF A<1 OR A>2 THEN
GOTO 470 ELSE B=A
    480 IF W>1 THEN GOTO 610
    490 TIME=0:REPEAT UNTIL TIME>100
    500 PRINT TAB(0,3);"The character will appe
ar first followed shortly by the code and soun
d."':TIME=0:REPEAT UNTIL TIME>200
    510 FOR x=1 TO 15
    520 IF B=1 THEN v=INT(RND(25)+1):PRINT TA
B(15);CHR$(v+64);
    530 IF B=2 THEN v=INT(RND(9)+27):PRINT TA
B(15);CHR$(v+21);
    540 TIME=0:REPEAT UNTIL TIME>100
    550 FOR y=1 TO 5
    560 IF c(v,y)<>0 THEN TIME=-((c(v,y)*5)
+2):SOUND 1,-15,100,c(v,y):REPEAT UNTIL TIME>
0
    570 NEXT y
    580 PRINT " = ";c$(v)
    590 NEXT x
    600 TIME=0:REPEAT UNTIL TIME>800:GOTO 70
    610 IF W>2 THEN GOTO 750
    620 PRINT TAB(0,3);"The code will appear fi
rst , followed shortly by the character and
sound."':TIME=0:REPEAT UNTIL TIME>200
    630 FOR x=1 TO 15
    640 IF B=1 THEN v=INT(RND(25)+1)
    650 IF B=2 THEN v=INT(RND(9)+27)
    660 PRINT TAB(17-LEN(c$(v)));c$(v);:TIME=
0:REPEAT UNTIL TIME>100
    670 FOR y=1 TO 5
    680 IF c(v,y)<>0 THEN TIME=-((c(v,y)*5)
+2):SOUND 1,-15,100,c(v,y):REPEAT UNTIL TIME>
0
    690 NEXT y

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700 PRINT " = ";
710 IF B=1 THEN PRINT CHR$(v+64)
720 IF B=2 THEN PRINT CHR$(v+21)
730 NEXT x
740 TIME=0:REPEAT UNTIL TIME>800:GOTO 70
750 PRINT TAB(0,3);" The sound will appear
first , followed shortly by the character and
code."':TIME=0:REPEAT UNTIL TIME>200
760 FOR x=1 TO 15
770 IF B=1 THEN v=INT(RND(25)+1)
780 IF B=2 THEN v=INT(RND(9)+27)
790 FOR y=1 TO 5
800 IF c(v,y)<>0 THEN TIME=-((c(v,y)*5)
+2):SOUND 1,-15,100,c(v,y):REPEAT UNTIL TIME>
0
810 NEXT y
820 TIME=0:REPEAT UNTIL TIME>100
830 PRINT TAB(10);"That was ";
840 IF B=1 THEN PRINT CHR$(v+64);" = ";c$(
(v)
850 IF B=2 THEN PRINT CHR$(v+21);" = ";c$(
(v)
860 TIME=0:REPEAT UNTIL TIME>100
870 NEXT x
880 TIME=0:REPEAT UNTIL TIME>800:GOTO 70
890 CLS:PRINT TAB(0,0);CHR$(141);CHR$(129);
"----- ALTER SPEED OF CODE -----"'CHR$(141)
;CHR$(131);"----- ALTER SPEED OF CODE -----
" '
900 PRINT " Enter a multiplication factor t
o alter the speed of the morse. Values less t
hanone will increase the speed."
910 INPUT A
920 IF A>9 THEN GOTO 910
930 PRINT "Please wait":s=s*A:l=l*A:GOSUB 1
100
940 GOTO 70
950 CLS:PRINT TAB(0,0);CHR$(141);CHR$(129);
"----- THE MORSE CODE -----"'CHR$(1
41);CHR$(131);"----- THE MORSE CODE ----
-----" '
960 FOR x=1 TO 13
970 PRINT TAB(5);CHR$(x+64);" = ";c$(x);T
AB(25);CHR$(x+77);" = ";C$(x+13)
980 NEXT x:PRINT

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990 FOR x=1 TO 5
1000 PRINT TAB(5);CHR$(x+47);" = ";c$(x+26)
;TAB(25);CHR$(x+52);" = ";c$(x+31)
1010 NEXT x
1020 PRINT TAB(6,24);CHR$(136);"PRESS ANY KE
Y TO RETURN";
1030 *FX 15,1
1040 IF INKEY$(1000)=" " THEN GOTO 1040
1050 GOTO 70
1060 s=1:l=3:o=0:x$=""
1070 f$="THIS IS A MESSAGE TO DEMONSTRATE TH
E MORSE CODE TUTOR THE COMPLETE ALPHABET IS
AS FOLLOWS ABCDEFGHIJKLMNOPQRSTUVWXYZ
AND THE NUMBERS ARE 1234567890"
1080 q$=""
"
1090 h$=" "
1100 RESTORE
1110 FOR x=1 TO 36
1120 FOR y=1 TO 5
1130 READ c(x,y)
1140 NEXT y
1150 NEXT x
1160 FOR x=1 TO 36
1170 READ c$(x)
1180 NEXT x
1190 RETURN
1200 DATA s,l,0,0,0,l,s,s,s,0,l,s,l,s,0,l,s,
s,0,0,s,0,0,0,0,s,s,l,s,0,l,l,s,0,0,s,s,s,0
,s,s,0,0,0,s,l,l,l,0,l,s,l,0,0,s,l,s,s,0,l,l,
0,0,0,l,s,0,0,0,l,l,l,0,0,s,l,l,s,0,l,l,s,l,0
,s,l,s,0,0,s,s,s,0,0,l,0,0,0,0,s,s,l,0,0,s,s,
s,l,0,s,l,l,0,0,l,s
1210 DATA s,l,0,l,s,l,l,0,l,l,s,s,0,l,l,l,l,
l,s,l,l,l,l,s,s,l,l,l,s,s,s,l,l,s,s,s,s,l,s,s
,s,s,s,l,s,s,s,s,l,l,s,s,s,l,l,l,s,s,l,l,l,l,
s
1220 DATA .-,-...,-.-.,-....,..--,...,..,
.-..,-.-.,-...,-./.-.,-.....,..--,...,..,
.-.....,-.-.,-.-.,-.-.,-.....,-.-.,-.-.,-.-.,
.-...,-.....,-.....,-.....,-.....,-.....,
1230 MODE 7
1240 PRINT TAB(12,12);CHR$(141);CHR$(129);"G
OOD BYE"TAB(12);CHR$(141);CHR$(129);"GOOD BY
E"
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1250 END