

1. Tudor History

General Description

This program is an example of a history tester program. It provides facts about and tests for the Elizabeth period. On starting the program you are faced with a menu, and unless you know your dates, I would suggest a quick peek at the facts. It will be possible to rewrite the data held from lines 1900 onwards, if you so wish.

Detailed Description

Lines 10-310 The main structure: most of the error trapping occurs here, though the escape key will provide a quick exit from the program.

320-480 The details of the menu and introduction are held in the defined strings at the end of the program, otherwise these procedures are just print statements.

490-660 Again the messages are held in defined strings at the end of the program. The questions are held in data statements from 2020 onwards.

670-930 These display pages of information about the Tudors or the goodbye message. Again refer to the end of the program for the definition of the strings.

1000-1140 General utility procedures.

1150-1250 This is the score display routine. Note that the space bar is the normal method of progressing through procedures.

1260-1590 These routines are the tester part of the program. The tick and cross are defined characters (see the end of program VDU 23 definitions).

1430-1890 These are all sub-procedures called from other procedures. Line 1570 can be rewritten slightly more elegantly, see if you can work out how. The delete routine (lines 1850-

1890) if too many characters are entered saves having to keep track of screen management by deleting the number of characters entered so far. It is not possible to delete wrong characters as you enter them; you must press RETURN and accept you have put in a wrong answer.

Educational Notes

This is a program suitable for a small group who may then discuss the answers amongst themselves. It does presuppose a knowledge of the Tudors to some degree but can be operated just from the data. I would not recommend this in the classroom, but as a self tutor at home it would be useful. You can, of course, use this structure to create your own questions on subject areas you have covered, in which case the data lines 1960-2000 would need to be rewritten.

Program Listing

```
10 REM Tudor History
20 REM Author --- Alan Dixon
30
40 REM LIST OF SINGLE KEY TESTS
50 REM 13 = return
60 REM 17 = escape
70 REM 32 = space bar
80 REM 49 = key 1
90 REM 50 = key 2
100 REM 51 = key 3
110 REM redefine break key and disable
120 REM edit keys
130 *KEY10OLD|MRUN|M
140 MODE1:*FX4,1
150 ON ERROR GOTO 260:REM traps escape
160 REM cursor/auto repeat off
170 VDU23,0,10,50,0;0;0;:*FX11,0
180 PROCset_words:CLS:PROCintro
190 REPEAT key=GET:UNTIL key=32
200 REPEAT:CLS:PROCmenu1:key=GET
210 IF key=49 PROCTest
220 IF key=50 PROCsummary
230 IF key=51 PROCElizabeth
240 UNTIL key=32
250 CLS:PROCbye
260 IF ERR <> 17 PRINTERR:PRINTERL
270 REM reset cursor auto repeat
280 REM and edit keys
290 VDU23,0,10,103,0;0;0;:*FX12,0
300 *FX4,0
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310 END
320
330 DEFPROCintro:VDU 7
340 REM first screen
350 PRINTTAB(17,3)WE1$'TAB(11)WE2$
360 PRINTTAB(5,9)WE3$'TAB(5)WE4$
370 PRINTTAB(5)WE5$''TAB(5)WE6$
380 PRINTTAB(5)WE7$'TAB(5)WE8$''''
390 PRINTTAB(5)PR$;"continue":ENDPROC
400
410 DEFPROCmenu1
420 REM list of choices
430 PRINTTAB(6,3)CH$
440 PRINTTAB(1,9)1;OT$'TAB(10)2;SOR$
450 PRINTTAB(1)3;SPC(2);E1$
460 PRINTTAB(6,17);OT5$'TAB(6);OT6$
470 PRINTTAB(7,24)PR$;"end":ENDPROC
480
490 DEFPROCtest:LOCAL key
500 REM main test routine
510 REM set cursor on
520 VDU23,0,10,103,0;0;0;
530 PROCscreen(13,3,OT$)
540 PRINTTAB(6,28)OT1$
550 PRINTTAB(6,29)OT2$
560 REM initialise
570 correct_answers=0
580 RESTORE 2020:line=7
590 REPEAT key=GET
600   IF key<>32 PROCmore_of_test
610 UNTIL key=32 OR question$="fin"
620 VDU7:IF key<>32 PROCresult
630 REM set cursor off
640 VDU23,0,10,50,0;0;0;
650 ENDPROC
660
670 DEFPROCsummary:LOCAL key
680 REM display summary of reigns
690 PROCscreen(10,3,SOR$)
700 PRINTTAB(17,9)SU1$;TAB(13)SU2$
710 PRINTTAB(2,12)H7$;SU3$
720 PRINTTAB(2)H8$;SU4$
730 PRINTTAB(2)E6$;SU5$
740 PRINTTAB(2)MT$;SU6$
750 PRINTTAB(2)E1$;SU7$
760 REPEAT key=GET:UNTIL key=32
770 ENDPROC
780
790 DEFPROCelizabeth:LOCAL key
800 PROCscreen(14,3,E1$)
810 PRINTTAB(4,8)E11$;SPC(10)E12$
820 PRINTTAB(4)E13$'TAB(4)E14$
830 PRINTTAB(10)E15$'TAB(4)E16$
840 PRINTTAB(4)E17$'TAB(10)E18$
850 PRINTTAB(4)E19$'TAB(4)E1A$
860 PRINTTAB(4)E1B$'TAB(10)E1C$
870 PRINTTAB(4)E1D$'TAB(4)E1E$
880 PRINTTAB(10)E1F$'TAB(10)E1G$
890 PRINTTAB(10)E1H$'TAB(4)E1I$
900 PRINTTAB(4)E1J$'TAB(4)E1K$
910 REPEAT key=GET:UNTIL key=32
920 ENDPROC
930

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940 DEFPROCbye:CLS
950 COLOUR2:PRINTTAB(17,12)"GOODBYE"
960 PRINTTAB(10,13)"THANKYOU FOR YOUR TIME"
970 COLOUR3
980 ENDPROC
990
1000 DEFPROCscreen(column,line,title$)
1010 REM display requested screen title
1020 CLS:PRINTTAB(column,line)title$
1030 PRINTTAB(6,30)PR$;"go back"
1040 ENDPROC
1050
1060 DEFPROCmore_of_test
1070 READ question$,my_answer$
1080 REM check for last question
1090 IF question$<>"fin" PROCask_again
1100 REM my_question$ now holds number
1110 REM of questions asked
1120 total_questions=VAL(my_answer$)
1130 ENDPROC
1140
1150 DEFPROCresult
1160 PRINTTAB(6,28)SPC(33)
1170 PRINTTAB(6,29)SPC(33)
1180 PRINTTAB(8,27)OT4$:VDU7
1190 PROCwait(25):VDU7
1200 PRINTTAB(6,28)"You have scored ";correct_answers;" o
ut of ";total_questions
1210 COLOUR2:IF correct_answers=total_questions PRINTTAB(9,
29)"WELL DONE--FUL MARKS!":VDU7
1220 COLOUR3
1230 REPEAT key=GET:UNTIL key=32
1240 ENDPROC
1250
1260 DEFPROCask_again
1270 PRINTTAB(1,line);question$;
1280 REPEAT PRINT SPC(1);:UNTIL POS=28
1290 REM * shows 2 line question
1300 IF my_answer$="*" PROCsecond_line
1310 REM keep asking until correct
1320 REM answer given or requested
1330 REPEAT
1340   answer$="ok":REM see PROCcross
1350   REM test length of answer as
1360   REM it is entered - max is 9
1370   count=0:limit=9:their_answer$=""
1380   REPEAT PROCcount_characters
1390   UNTIL count<=limit
1400   IF their_answer$=my_answer$ PROCTick ELSE IF their_a
nswer$="?" PRINTTAB(30,line)my_answer$; ELSE PROCcross
1410 UNTIL answer$<>"wrong"
1420 line=line+1:ENDPROC
1430
1440 DEFPROCtick
1450 COLOUR2:PRINTTAB(38,line)tick$
1460 correct_answers=correct_answers+1
1470 COLOUR3:ENDPROC
1480
1490 DEFPROCcross
1500 COLOUR1:PRINTTAB(38,line)cross$
1510 answer$="wrong":VDU7
1520 PRINTTAB(0,5);OT3$:PROCwait(100)
1530 PRINTTAB(16,5);OT7$;:PROCwait(100)

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1540 VDU7:PRINTTAB(1,line);SPC(40)
1550 PRINTTAB(0,5);SPC(40)
1560 COLOUR3:PRINTTAB(1,line);question$;
1570 REPEAT PRINT SPC(1);:UNTIL POS=28
1580 ENDPROC
1590
1600 DEFPROCwait(delay):T%=TIME
1610 REPEAT T%=TIME-T%:UNTIL T%=delay
1620 ENDPROC
1630
1640 DEFPROCsecond_line
1650 READ question$,my_answer$
1660 PRINTTAB(1,line)'TAB(1)question$;
1670 line=line+1
1680 REPEAT PRINT SPC(1);:UNTIL POS=28
1690 ENDPROC
1700
1710 DEFPROCcount_characters
1720 REPEAT count=0
1730     REPEAT key$=GET$
1740         IF ASC(key$)<>13 AND ASC(key$) <>127 PROCincr_coun
t
1750     UNTIL count>limit OR ASC(key$)=13
1760     IF count>limit PROCToo_many
1770 UNTIL count<=limit
1780 ENDPROC
1790
1800 DEFPROCincr_count
1810 PRINTkey$;:count=count+1
1820 their_answer$=their_answer$+key$
1830 ENDPROC
1840
1850 DEFPROCToo_many
1860 VDU7:their_answer$="":deletes=0
1870 REPEAT deletes=deletes+1:VDU127
1880 UNTIL deletes=count
1890 ENDPROC
1900
1910 DEFPROCset_words
1920 WE1$="WELCOME":WE2$="TO THE TUDOR PERIOD":WE3$="This p
rogram will teach you about":WE4$="Elizabeth I, the last T
udor":WE5$="Monarch of England.":WE6$="Move from one screen
to the next":WE7$="by keying the number of your"
1930 WE8$="choice or pressing the space bar.":H7$="HENRY VI
I":H8$="HENRY VIII":MT$="MARY TUDOR":E6$="EDWARD VI":E1$="EL
IZABETH I":PR$="Press the space bar to ":CH$="CHOOSE ONE OF
THE FOLLOWING"
1940 OT$=" OVERALL TEST":SOR$=" SUMMARY OF REIGNS":OT1$="
Press return to get a question":OT2$="Enter ? to see the rig
ht answer":OT3$="Hold everything":OT4$="That was the last qu
estion"
1950 OT5$="You may want to choose 1 before":OT6$="and after
taking the tutorial":OT7$="Try again after the beep":questi
on$="":ticks=0:VDU23,224,129,66,36,24,24,36,66,129:cross$=CH
R$(224):VDU23,225,0,0,1,2,4,136,80,32:tick$=CHR$(225)
1960 SU1$="LIVED":SU2$="REIGNED":SU3$=" 1457--1509 148
5--1059":SU4$=" 1492--1547 1509--1547":SU5$=" 1537--1
553 1547--1553":SU6$=" 1526--1558 1553--1558":SU7$="
1533--1603 1558--1603"
1970 E11$="1533--Henry VIII marries Anne Boleyn":E12$="Eliz
abeth born":E13$="1536--Anne Boleyn executed":E14$="1558--Ma
ry Tudor dies":E15$="ELIZABETH becomes queen":E16$="1564--Sh
akespeare born"

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1980 El7$="1568--Mary Queen of Scots arrives":El8$="in Engl
and":El9$="1569--Rebellion in the North":ElA$="1570--Pope ex
communicates ELIZABETH":ElB$="1571--Ridolfi Plot.Duke of Nor
folk":ElC$="arrested":ElD$="1572--Norfolk executed"
1990 ElE$="1577--Drake sets out in Golden Hind":ElF$="on fi
rst circumnavigation of":ElG$="world by Englishmen":ElH$="Jo
urney takes 3 years":ElI$="1587--Mary Queen of Scots execute
d":ElJ$="1588--Spanish Armada defeated"
2000 ElK$="1603--ELIZABETH dies"
2010 ENDPROC
2020 DATAWhen did HENRY VIII die?,1547,How old was ELIZABET
H when,*,her mother was beheaded?,3,Who was the first Tudor,
*, Monarch?,HENRY VII
2030 DATAWhen was Mary Queen of,*,Scots executed?,1587,How
old was ELIZABETH when,*,she became Queen?,25,Who was the fi
rst Englishman,*,to sail round the world?,DRAKE,How many yea
rs did his,*,journey take?,3
2040 DATAWhen did the Spanish,*,Armada sail?,1588,How many
years did,*,ELIZABETH reign,45,When did she die,1603
2050 DATAfin,10

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