

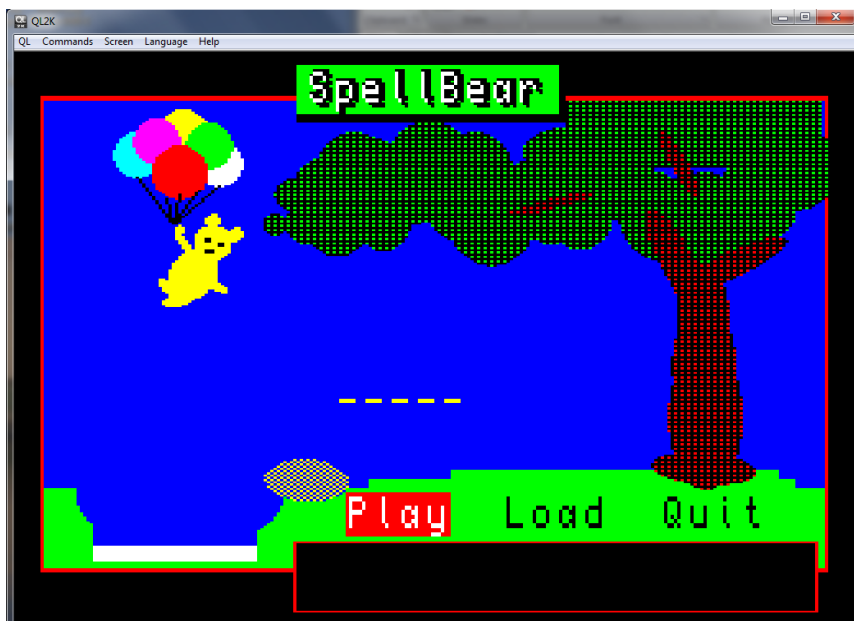
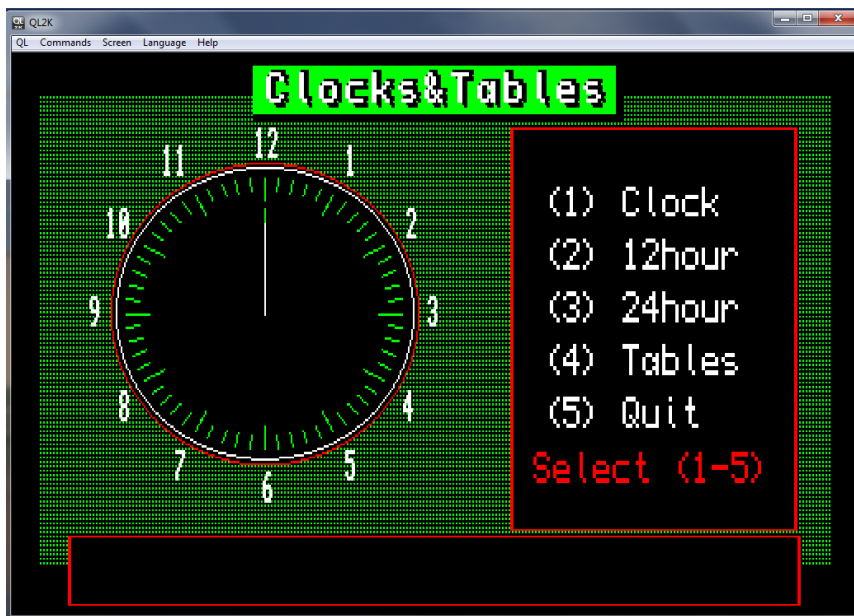


Sinclair QL Retro Gaming



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QBConundrum 2017



QL Retro Gaming

The QL design was aimed at the business world and as a gaming platform I fear in its short production life was always to reside in the shadow of the Spectrum. Not to say that a large number of games were developed by enthusiasts experimenting with the SuperBASIC interpreter my own included.

QBITS

My contribution was a short list of programmes mostly written between 1987 and 1990. Becoming a member of QUANTA introduced me to shows and gatherings and in the early nineties I was persuaded to offer some of my games to other members under the banner of QBITS.

What follows are what I refer to as my early learning phase. That is to say being a father and having an interest in child education I set about writing a few simple programs to help them in that respect.

Clocks_Tables

Having just started infant's school, I spent some hours one Sunday morning with my daughter getting her to read different times from a cardboard clock face. Moving the hours and minutes hands presented no problem, she did well, but the second hand was something of a mystery.

I asked her what seconds were, several frowns and thoughtful expressions danced across her face. After a long pause, her face suddenly lit up. she replied, 'when its dinner time at school you sometimes get a second helping of pudding'.

Clocks was my attempt to help understanding the analogue clock face as opposed to that shown on a digital clock covering both twelve and twenty four hour cycles. Tables was as you'd expect simple arithmetic aimed at improving the learning and use of the times tables 1 to 12.

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SpellBear

The origins of Hangman the word game are obscure, but mostly likely began in Victorian times. The word represented by a line of dashes for letters are guessed at and completed or Not as the case may be within so many turns. The Gallows with hanged man drawn in body parts each time a letter is incorrect. There are many variants a common alternative for a young child is to draw apples on a tree, removing them for each incorrect letter.

For me I chose a bear flying high holding a set of balloons. An incorrect letter and the bear floated earthwards losing his balloons eventually dropping into a pond of water.

Conundrum

Wanting to take this to another level Conundrum was inspired by the popular UK TV program – Countdown, another game involving word play. The display was going to be somewhat obvious, a clock face with a countdown second hand, then a row of jumbled letters to be sorted into the correct order.

How was this to be done, it seemed logical for a second row to be set below with the same number of underlines to represent the missing letters. The player would then attempt to type in letters in the correct order before the clock countdown and so score maximum points. For scoring, two score lines one showing the accrued maximum points that could have been won, the other to show the player's accrued points.

An added option at this point was TIME to allow the increase or decrease of the countdown second hand. An adjustable variable used to create more tension dependent on an individual's ability.

It would be heavy going having constantly to change an embedded word list within the Conundrum program. So what was needed next was a method of expanding and developing future word lists for the Conundrum game.

The main requirement was going to be a line editor, one that would be capable of adding, inserting and deleting characters within a line of set length. At this point a further idea to expand to the capabilities of the Conundrum Game was to use word clues. Instead of showing the jumbled up letters, an option would be to replace them by coloured block. The Conundrum game would now have options to switch Clues and/or Word options On/Off.

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Conundrum Options Clue Load Play Time Word

- Clue** **Off/On** Default Off - Clue only shown if available.
Load Select drive and then Wrd_filename from a list presented.
Play Activate a word, then play against countdown
Time **Default 30** seconds - allow countdown to be increased or decreased.
Word **On/Off** Default On - cannot turn Off unless clue turned On

QBWord_Gen

This accompanying program to Conundrum was the outcome in generating the necessary word and clue lists. A simple two column layout, typed in words on the left with any clue definitions to be placed on the right.

QBWord_Gen Options New Edit Find Load Save

New

Maximum number of Words and Clues 96.
Set out as 6 pages with 16 Words / Clues to a page
Maximum Word length 15 characters
Maximum Clues length 32 characters including spaces

Edit

Edit the line editor. Tab between word and Clue, also up/down cursors to work within the page. To move along the edit line use of left/right cursors. Add to end of line, insert or delete a character within the line at the cursor position with any subsequent overspill being automatically deleted from end of line.

Find

Select a page and any line within the page.

- Load** Select drive device, then choose from Wrd_filenames presented
Save Select drive device, then type name i.e. flp1_Wrd_**filename: Save**

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100 REMark Conundrum (QBITS □1992)

102 :

104 Init:Title:Clk_Face:Menu

108 DEFine PROCEDURE Init

110 WTV:MODE 8

112 OPEN #3,sqr_480x230a16x4 :PAPER #3,32:CLS #3:CSIZE #3,2,0

114 OPEN #4,con_444x32a34x220:PAPER #4,0:CLS #4:BORDER #4,1,2

116 OPEN #5,sqr_444x170a34x32:PAPER #5,1:CLS #5:BORDER #5,2,5

118 DIM Title\$(10),Command\$(30),key\$(16),str\$(36),k\$(1)

120 DIM Sort\$(16),Con1\$(16),Con2\$(16),DR\$(6,5),SDR\$(5)

122 INK #4,7:RESTORE :FOR i=1 TO 6:READ DR\$(i)

124 DATA 'mdv1_', 'mdv2_', 'flp1_', 'flp2_', 'ram1_', 'ram2_'

126 max_score%=0:per_score%=0:count%=0:D%=3:SDR\$=DR\$(3):key\$=""

128 END DEFine

132 DEFine PROCEDURE Title

134 Title\$='Conundrum':BLOCK #3,480,15,0,0,0

136 BLOCK #3,180,22,156,6,0:BLOCK #3,176,22,156,2,4

138 CSIZE #3,3,1:OVER #3,1

140 INK #3,0:FOR i=0 TO 3:CURSOR #3,176-i,2 :PRINT #3,Title\$

142 INK #3,0:FOR i=0 TO 3:CURSOR #3,176-i,5-i:PRINT #3,Title\$

144 INK #3,7:FOR i=0 TO 1:CURSOR #3,172+i,3 :PRINT #3,Title\$

146 CSIZE #3,2,0:OVER #3,0

148 END DEFine

152 DEFine PROCEDURE Clk_Face

154 INK #5,7:FILL #5,1:CIRCLE #5,48,50,35:FILL #5,0

156 INK #5,3:FILL #5,1:CIRCLE #5,48,50,34:FILL #5,0

158 INK #5,0

160 FOR j=3 TO 5 STEP 2

162 FOR i=0 TO 360 STEP j*12-30

164 x=34*SIN(RAD(i));y=34*COS(RAD(i))

166 x1=(34-j)*SIN(RAD(i));y1=(34-j)*COS(RAD(i))

168 xx=x+48:xx1=x1+48:yy=y+50:yy1=y1+50

170 LINE #5,xx,yy TO xx1,yy1

172 END FOR i

174 END FOR j

176 INK #5,7

178 CURSOR #5,100, 14:PRINT #5,'0'

180 CURSOR #5,190, 78:PRINT #5,'15'

182 CURSOR #5, 95,145:PRINT #5,'30'

184 CURSOR #5, 1, 78:PRINT #5,'45'

186 Time%=180:Sech%=180:Sec%=180:Countdown

188 END DEFine

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192 DEFine PROCedure Menu

```
194 STRIP #3,0:CSIZE #4,0,0:S=1:F=0:Clue%=0:Word%=1
196 Command$=' Clue Load Play Time Word '
198 REPEAT Comm_lp
200 x=S*72+58:y=202:INK #3,7:CORSOR #3,58,y:PRINT #3,Command$:INK #3,0
202 STRIP #3,4:CORSOR #3,x,y:PRINT #3,Command$(S*6+1 TO S*6+6)
204 STRIP #3,0:CLS #4:SEt_Word:SEt_Clue
206 STRIP #3,0:INK #3,4:k$=INKEY$(#4,30):k=CODE(k$)
208 SElect ON k
210 =192:S=S-1:IF S<0:S=4
212 =200:S=S+1:IF S>4:S=0
214 = 27:MODE 4:STOP
216 = 10:SElect ON S
218 =0:IF Clue%=1 AND Word%=1:Clue%=0:ELSE Clue%=1
220 =1:SEl_Dev:CLS #4:S=2
222 =2:IF F:count%=count%+1:Play:Score:ELSE S=1
224 =3:SEt_Time:CLS #4:S=2
226 =4:IF Word%=1 AND Clue%=1:Word%=0:ELSE Word%=1
228 END SElect
230 END SElect
232 END REPEAT Comm_lp
234 END DEFine
```

238 DEFine PROCedure SEt_Clue

```
240 INK #3,2:IF Clue%=1:CORSOR #3,24,200:PRINT #3,'ON'
242 INK #3,0:IF Clue%=0:CORSOR #3,24,200:PRINT #3,' '
244 END DEFine
```

248 DEFine PROCedure SEt_Word

```
250 INK #3,2:IF Word%=1:CORSOR #3,424,200:PRINT #3,'ON'
252 INK #3,7:IF Word%=0:CORSOR #3,424,200:PRINT #3,' '
254 END DEFine
```

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258 DEFine PROCEDURE Sel_Dev

```
260 CLS #4:CURSOR #4,10,5:PRINT #4,'Select Device name <3/4>:'
262 REPEAT Dev_lp
264 CURSOR #4,300,5:PRINT #4,DR$(D%)
266 k$=INKEY$(#4,20):k=CODE(k$)
268 SElect ON k
270 =208:D%=D%-1:IF D%<1:D%=6
272 =216:D%=D%+1:IF D%>6:D%=1
274 =10 :EXIT Dev_lp
276 =27 :RETurn
278 END SElect
280 END REPEAT Dev_lp
282 SDR$=DR$(D%):FList
284 END DEFine
```

288 DEFine PROCEDURE FList

```
290 n%=1:num%=20:ftot%=0
292 DIM Volumn$(11),Sector$(24),file$(20,36),df$(36)
294 CLS #4:CURSOR #4,10,5:PRINT #4,'Files being selected... '
296 DELETE SDR$&'FList'
298 OPEN_NEW #6,SDR$&'FList':DIR #6,SDR$:CLOSE #6
300 OPEN_IN #6,SDR$&'FList':INPUT #6,Volumn$,Sector$
302 REPEAT DIR_lp
304 IF EOF(#6) OR n%>num%:ftot%=n%-1:CLOSE #6:EXIT DIR_lp
306 INPUT #6,df$
308 IF 'Wrd_' INSTR df$<>0:file$(n%)=df$:n%=n%+1
310 END REPEAT DIR_lp
312 IF ftot%<1
314 CLS #4:CURSOR #4,10,5:PRINT #4,'No Word Files found... '
316 PAUSE:CLS #4:RETurn
318 END IF
320 Sel_File
322 END DEFine
```

326 DEFine PROCEDURE Sel_File

```
328 CLS #4:CURSOR #4,10,5:PRINT #4,'Select WrD File <3/4i>':n%=1
330 REPEAT File_lp
332 str$=file$(n%,4+('Wrd_' INSTR file$(n%)) TO)
334 CURSOR #4,270,5:PRINT #4,str$:CLS #4,4
336 k$=INKEY$(#4,20):k=CODE(k$)
338 SElect ON k
340 =208:n%=n%-1:IF n%<1:n%=ftot%
342 =216:n%=n%+1:IF n%>ftot%:n%=1
344 =10 :EXIT File_lp
346 =27 :RETurn
348 END SElect
350 END REPEAT File_lp
352 WrD_Load
354 END DEFine
```


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358 DEFine PROCedure Wrd_Load

```
360 DIM Word$(100,14),Clue$(100,32):F=1:w%=1:CLS #4
362 CURSOR #4,10,5:PRINT #4,'Loading Word File...'
364 OPEN_IN #6,SDR$&file$(n%)
366 REPeat Wrd_lp
368 INPUT #6,Word$(w%),Clue$(w%)
370 IF EOF(#6):CLOSE #6:EXIT Wrd_lp
372 CURSOR #4,300,5:PRINT #4,w%:CLS #4,4:w%=w%+1
374 END REPeat Wrd_lp
376 END DEFine
```

380 DEFine PROCedure Set_Time

```
382 Sec%=Time%:Countdown
384 CLS #4:CURSOR #4,10,5:PRINT #4,'Set Count Down Time: ¼ ½'
386 REPeat Time_lp
388 k$=INKEY$(#4,20):k=CODE(k$)
390 SElect ON k
392 =192:Sec%=Sec%+6:Countdown
394 =200:Sec%=Sec%-6:Countdown
396 = 10:Time%=Sec%:EXIT Time_lp
398 = 27:RETurn
400 END SElect
402 END REPeat Time_lp
404 END DEFine
```

408 DEFine PROCedure Countdown

```
410 INK #5,3
412 LINE #5,48,50 TO 48+26*SIN(RAD(Sech%)),50+26*COS(RAD(Sech%))
414 INK #5,7:Sech%=Sec%:BEEP 200,10
416 LINE #5,48,50 TO 48+26*SIN(RAD(Sech%)),50+26*COS(RAD(Sech%))
418 END DEFine
```



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422 DEFine PROCedure Play

```
424 RANDOMISE:n%=RND(1 TO w%)
426 IF Word$(n%)=key$
428   IF INKEY$(#4,5)=CHR$(27):RETurn :ELSE GO TO 424
430 ELSE
432   Wrd_Sort
434 END IF
436 Count=DATE:Sec%=Time%:Countdown
438 ch%=1:pos%=1:key$=FILL$('_',lgth%)
440 CURSOR #5,190,125:PRINT #5,key$:CLS #5,4
442 REPEAT Wrd_lp
444   STRIP #5,5:CURSOR #5,174+16*ch%,125:PRINT #5,key$(ch%)
446   k$=INKEY$(#4,20):k=CODE(k$)
448   SElect ON k
450     =192:ch%=ch%-1:IF ch%<1:ch%=1
452     =200:ch%=ch%+1:IF ch%>lgth%:ch%=lgth%
454     =32,48 TO 57,65 TO 90,97 TO 122
456       IF Set(ch%)<>3:key$(ch%)=k$:ch%=ch%+1:ELSE ch%=ch%+1
458       IF ch%>lgth%:ch%=1
460   END SElect
462   STRIP #5,1:CURSOR #5,174+16*pos%,125:PRINT #5,key$(pos%):pos%=ch%
464   IF key$(ch%)=Word$(n%,ch%):Set(ch%)=3
466   IF key$=Word$(n%) OR Sec%=0:EXIT Wrd_lp
468   IF Count<>DATE:Sec%=Sec%-(6*(DATE-Count)):Countdown:Count=DATE
470 END REPEAT Wrd_lp
472 FOR ch=1 TO LEN(key$):IF key$(ch)=Word$(n%,ch):per_score%=per_score%+5
474 key$=Word$(n%):CURSOR #5,190,25:PRINT #5,key$
476 CSIZE #5,2,0:CURSOR #5,190,100:PRINT #5,'Score points: 'per_score%:CLS #5,4:CSIZE
#5,3,1
478 END DEFine
```



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482 DEFine PROCedure WrD_Sort

```
484 CSIZE #5,3,1:INK #5,7
486 CURSOR #5,190,25:PRINT #5,FILL$( ' ',15)
488 Sort$=Word$(n%):lgth%=LEN(Sort$)
490 DIM Set(lgth%)
492 FOR Sort=1 TO lgth%-1
494   r1=RND(1 TO lgth%):r2=RND(1 TO lgth%)
496   Con1$=Sort$(r1):Con2$=Sort$(r2)
498   Sort$(r1)=Con2$:Sort$(r2)=Con1$
500 END FOR Sort
502 IF Sort$=Word$(n%):GO TO 492
504 IF Word%=1:CURSOR #5,190,25:PRINT #5,Sort$
506 IF Word%=0
508   FOR blk=1 TO lgth%
510     BLOCK #5,14,20,174+blk*16,25,7
512     BLOCK #5,10,18,176+blk*16,25+1,(blk MOD 8)
514   END FOR blk
516 END IF
518 IF Clue%=1:CURSOR #4,10,5:PRINT #4,Clue$(n%):CLS #4,4
520 max_score%=max_score%+5*lgth%
522 CSIZE #5,2,0:CURSOR #5,190,55:PRINT #5,'Max points: ',max_score%:CLS #5,4:CSIZE
#5,3,1
524 END DEFine
```

528 DEFine PROCedure Score

```
530 INK #5,3:FILL #5,1:CIRCLE #5,48,50,28:FILL #5,0
532 INK #5,0:ARC #5,28,60 TO 44,60,-PI/2
534   ARC #5,28,60 TO 44,60,-PI/2.3
536   ARC #5,52,60 TO 68,60,-PI/2
538   ARC #5,52,60 TO 68,60,-PI/2.3
540 IF Sec%<6:ARC #5,30,40 TO 66,40,-PI/2:ARC #5,30,40 TO 66,40,-PI/2.2
542 IF Sec%>0:ARC #5,30,40 TO 66,40,PI/2:ARC #5,30,40 TO 66,40,PI/2.2
544 INK #5,1:FILL #5,1:CIRCLE #5,36,58,2.5:FILL #5,0
546 INK #5,1:FILL #5,1:CIRCLE #5,60,58,2.5:FILL #5,0
548 CLS #4:CURSOR #4,25,5:PRINT #4,'Press ENTER to continue...'
550 k$=INKEY$(#4,-1):IF k$<>CHR$(10):GO TO 550
552 INK #5,3:FILL #5,1:CIRCLE #5,48,50,28:FILL #5,0
554 CURSOR #5,190,25:CLS #5,4
556 CURSOR #5,190,125:CLS #5,4
558 IF count%>=100
560   CLS #4:CURSOR #4,25,5:PRINT #4,'Counters are to be reset...'
562   PAUSE 100:count%=0:max_score%=0:per_score%=0
564   CURSOR #5,190,50:CLS #5,4:CURSOR #5,190,95:CLS #5,4
566 END IF
568 END DEFine
```

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100 REMark QBWord_Gen (QBITS Word Generator □1992)

102 :

104 Init:Title:Menu

108 DEFine PROCedure Init

```
110 MODE 4:OPEN #3,scr_512x256a0x0:PAPER #3,0:CLS #3:CLOSE #3
112 OPEN #3,scr_480x230a16x4 :PAPER #3,32:CLS #3:CSIZE #3,2,0
114 OPEN #4,con_444x34a34x220 :PAPER #4,0 :CLS #4:BORDER #4,1,2
116 OPEN #5,con_128x164a38x38 :PAPER #5,0 :CLS #5:BORDER #5,2,0
118 OPEN #6,con_264x164a208x38:PAPER #6,0 :CLS #6:BORDER #6,2,0
120 CSIZE #4,1,0:INK #4,7:CSIZE #5,1,0:INK #5,7:CSIZE #6,1,0:INK #6,7
122 DIM DR$(6,5),SDR$(5):RESTORE :FOR i=1 TO 6:READ DR$(i)
124 DATA 'mdv1_', 'mdv2_', 'flp1_', 'flp2_', 'ram1_', 'ram2_'
126 D=3:SDR$=DR$(3)
128 END DEFine
```

132 DEFine PROCedure Title

```
134 DIM Title$(12):Title$=' QBWord_Gen '
136 BLOCK #3,480,15,0,0,0 :BLOCK #3,172,22,152,6,0
138 BLOCK #3,168,22,152,2,4:CSIZE #3,3,1:OVER #3,1
140 INK #3,0:FOR i=0 TO 3:CURSOR #3,144-i,2:PRINT #3,Title$
142 INK #3,0:FOR i=0 TO 3:CURSOR #3,144-i,5-i:PRINT #3,Title$
144 INK #3,7:FOR i=0 TO 1:CURSOR #3,140+i,3:PRINT #3,Title$
146 CSIZE #3,2,0
148 INK #3,7:FOR i=0 TO 1:CURSOR #3,22+i,22 :PRINT #3,'Words'
150 INK #3,7:FOR i=0 TO 1:CURSOR #3,392+i,22:PRINT #3,'Clues'
152 OVER #3,0
154 END DEFine
```

158 DEFine PROCedure Menu

```
160 STRIP #3,0:DIM Command$(36),k$(1):S=0:W%=0
162 Command$=' New Edit Find Load Save Quit '
164 REPEAT Comm_ip
166 x=S*72+24:y=202:INK #3,7
168 CURSOR #3,24,y:PRINT #3,Command$:INK #3,0
170 STRIP #3,7:CURSOR #3,x,y:PRINT #3,Command$(S*6+1 TO S*6+6)
172 STRIP #3,0:k$=INKEY$(#4,30):k=CODE(k$)
174 SELEct ON k
176 =192:S=S-1:IF S<0:S=5
178 =200:S=S+1:IF S>5:S=0
180 = 27:STOP
182 = 10:SELEct ON S
184 =0:WNew :CLS #4:S=1
186 =1:IF W% :WEdit :CLS #4:S=2
188 =2:IF W% :WFind :CLS #4:S=1
190 =3:DSel :FList :CLS #4:S=2
192 =4:IF W% :DSel :WSave:CLS #4:S=0
194 =5:STOP
196 END SELEct
198 END SELEct
200 END REPEAT Comm_ip
202 END DEFine
```

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```
206 DEFine PROCedure WNew
208 CURSOR #4,40,5:PRINT #4,'Create NEW WORD File (y/n) ' ;
210 IF INKEY$(#4,-1)='y'
212   DIM Word$(96,15),Clue$(96,32),str$(36)
214   CLS #5:CLS #6:W%=1:l=1:k=49:Pg_Prn
216 END IF
218 END DEFine

222 DEFine PROCedure WEdit
224 ch%=5:c%=1:Str_Chk:BCol%=7:ICol%=0:CURSOR #4,15,5
226 PRINT #4,'(TAB) WORD/CLUE : (CTRL1/4/1/2) DEL : (3/4i) UP/DOWN Line'
228 REPEAT Edit_lp
230   CCol%=2:Str_Clr:Ln_Prn:Ln_Cur
232   k$=INKEY$(#4,-1):k=CODE(k$)
234   SELEct ON k
236     = 9:Ln_Prn:Str_Clr:c%=1
238     IF ch%=5:ch%=6:ELSE ch%=5:END IF :Str_Chk
240     = 10:BCol%=0:ICol%=7:Ln_Prn:Str_Clr:Wrd_Chk:RETurn
242     =32 TO 126:Ln_Prn:Add_chr
244     =194:CCol%=7:Ln_Cur:IF c%>1:c%=c%-1:Del_chr
246     =202:CCol%=7:Ln_Cur:Del_chr
248     =192:CCol%=7:Ln_Cur:IF c%>1:c%=c%-1
250     =200:CCol%=7:Ln_Cur:IF c%<clen%+1:c%=c%+1
252     =208:Ln_Clr:IF r%>0 :r%=r%-10:l=l-1:c%=1:Str_Chk
254     =216:Ln_Clr:IF r%<150:r%=r%+10:l=l+1:c%=1:Str_Chk
256 END SELEct
258 END REPEAT Edit_lp
260 END DEFine

264 DEFine PROCedure WFind
266 CURSOR #4,40,5
268 PRINT #4,'Select WORD (3/4i) or PAGE (1 - 6)'
270 REPEAT Find_lp
272   BCol%=7:ICol%=0:Ln_Prn
274   k$=INKEY$(#5,-1):k=CODE(k$)
276   SELEct ON k
278     =49 TO 54:Pg_Prn
280     =208:BCol%=0:ICol%=7:Ln_Prn:IF r%>0 :r%=r%-10:l=l-1
282     =216:BCol%=0:ICol%=7:Ln_Prn:IF r%<150:r%=r%+10:l=l+1
284     = 10:BCol%=0:ICol%=7:Ln_Prn:RETurn
286 END SELEct
288 END REPEAT Find_lp
290 END DEFine
```

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294 DEFine PROCEDURE Str_Chk

296 IF ch%=5:clen%=LEN(Word\$(1)):cmax%=15:str\$=Word\$(1)

298 IF ch%=6:clen%=LEN(Clue\$(1)):cmax%=32:str\$=Clue\$(1)

300 END DEFine

Checks on Word and Clue string lengths

304 DEFine PROCEDURE Str_Clr

306 IF LEN(str\$)>cmax%:str\$=str\$(1 TO cmax%)

308 IF ch%=5:Word\$(1)=str\$:ELSE Clue\$(1)=str\$

310 END DEFine

Word and Clue boundaries for characters

314 DEFine PROCEDURE Ln_Clr

316 Str_Clr:BCol%=0:ICol%=7:CCol%=0:Ln_Prn:BCol%=7:ICol%=0:c%=1

318 END DEFine

Clear redundant Character form line

322 DEFine PROCEDURE Ln_Prn

324 STRIP #5,BCol%:INK #5,ICol%

326 CURSOR #5,0,r%:PRINT #5,Word\$(1)&FILL\$(' ',15-LEN(Word\$(1)))

328 STRIP #6,BCol%:INK #6,ICol%

330 CURSOR #6,0,r%:PRINT #6,Clue\$(1)&FILL\$(' ',32-LEN(Clue\$(1)))

332 END DEFine

Line print

336 DEFine PROCEDURE Pg_Prn

338 INK #3,4:BCol%=0:ICol%=7:r%=-10

340 FOR l=(k-48)*16-15 TO (k-48)*16:r%=r%+10:Ln_Prn

342 CURSOR #3,22,5:PRINT #3,'Page 'k-48:r%=0:l=l-15

344 END DEFine

Page print

348 DEFine PROCEDURE Ln_Cur

350 BLOCK #ch%,8,1,c%*8-8,r%+9,CCol%

352 END DEFine

Underline cursor

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```
356 DEFine PROCEDURE Add_chr
358 IF clen%<cmax%
360   IF clen%>0
362     IF c%=1:str$=k$&str$(1 TO)
364     IF c%>1 AND c%<=clen%
366       str$=str$(1 TO c%-1)&k$&str$(c% TO)
368     END IF
370     IF c%=clen%+1:str$=str$&k$
372     c%=c%+1:clen%=clen%+1
374   END IF
376   IF clen%=0:str$=k$:clen%=clen%+1:c%=c%+1
378 ELSE
380   IF c%<cmax%:str$(c%)=k$:c%=c%+1:ELSE str$(cmax%)=k$
382 END IF
384 IF c%>cmax% OR clen%>cmax%:c%=cmax%:clen%=cmax%
386 END DEFine

390 DEFine PROCEDURE Del_chr
392 IF clen%>1
394   IF c%=1:str$=str$(2 TO clen%):clen%=clen%-1:END IF
396   IF c%>1 AND c%<clen%
398     str$=str$(1 TO c%-1)&str$(c%+1 TO):clen%=clen%-1:RETurn
400   END IF
402   IF c%>1 AND c%=clen%
404     clen%=clen%-1:str$=str$(1 TO clen%)
406   END IF
408 ELSE
410   str$="":clen%=0:c%=1
412 END IF
414 END DEFine
416 :
418 DEFine PROCEDURE Wrd_Chk
420 IF Word$(1)<>":str$=Word$(1):c=LEN(str$):ELSE RETurn
422 FOR i=c TO 1 STEP -1:IF str$(i)=' ':str$=str$(1 TO c-1)
424 END DEFine
```

QBConundrum 2017

428 DEFine PROCedure DSeI

```
430 CLS #4:CURSOR #4,40,5
432 PRINT #4,'Select Device < ¼ >'
434 REPeat Dev_lp
436 CURSOR #4,230,5:PRINT #4,DR$(D)
438 k$=INKEY$(#4,20):k=CODE(k$)
440 SElect ON k
442 =208:D=D-1:IF D<1:D=6
444 =216:D=D+1:IF D>6:D=1
446 =10:SDR$=DR$(D):EXIT Dev_lp
448 END SElect
450 END REPeat Dev_lp
452 END DEFine
```

456 DEFine PROCedure FList

```
458 DIM file$(20,36),Volumn$(12),Sector$(24),str$(36):f%=1:ftot%=0
460 CLS #4:CURSOR #4,40,5:PRINT #4,'Files being selected... '
462 DELETE SDR$&'FList'
464 OPEN_NEW #8,SDR$&'FList':DIR #8,SDR$:CLOSE #8
466 OPEN_IN #8,SDR$&'FList'
468 INPUT #8,Volumn$,Sector$
470 REPeat DIR_lp
472 IF EOF(#8) OR f%>20:ftot%=f%-1:CLOSE #8:EXIT DIR_lp
474 INPUT #8,str$
476 IF 'Wrd_' INSTR str$<>0:file$(f%)=str$:f%=f%+1
478 END REPeat DIR_lp
480 IF ftot%<1
482 CLS #4:CURSOR #4,40,5:PRINT #4,'No Word Files found... '
484 PAUSE 100:CLS #4:S=0:RETurn
486 END IF
488 FSeI
490 END DEFine
```

494 DEFine PROCedure FSeI

```
496 f%=1:CLS #4:CURSOR #4,40,5
498 PRINT #4,'Select Word File < ¼ >'
500 REPeat File_lp
502 str$=file$(f%,4+('Wrd_' INSTR file$(f%)) TO)
504 CURSOR #4,230,5:PRINT #4,str$:CLS #4,4
506 k$=INKEY$(#4,20):k=CODE(k$)
508 SElect ON k
510 =208:f%=f%-1:IF f%<1:f%=ftot%
512 =216:f%=f%+1:IF f%>ftot%:f%=1
514 =10 :EXIT File_lp
516 =27 :RETurn
518 END SElect
520 END REPeat File_lp
522 WLoad
524 END DEFine
```


QBConundrum 2017

528 DEFine PROCEDURE WLoad

```
530 DIM Word$(96,15),Clue$(96,32),str$(32):l=1:CLS #5:CLS #6
532 CURSOR #3,22,5:PRINT #3,' '
534 CLS #4:CURSOR #4,40,5:PRINT #4,'Loading Word File...'
536 OPEN_IN #8,SDR,$&file$(f%)
538 REPEAT Wrd_lp
540 INPUT #8,Word$(l),Clue$(l)
542 REMark CURSOR #4,220,5:PRINT #4,l:CLS #4,4
544 IF EOF(#8)OR l=96:CLOSE #8:W%=1:EXIT Wrd_lp
546 l=l+1
548 END REPEAT Wrd_lp
550 l=1:k=49:Pg_Prn
552 END DEFine
```

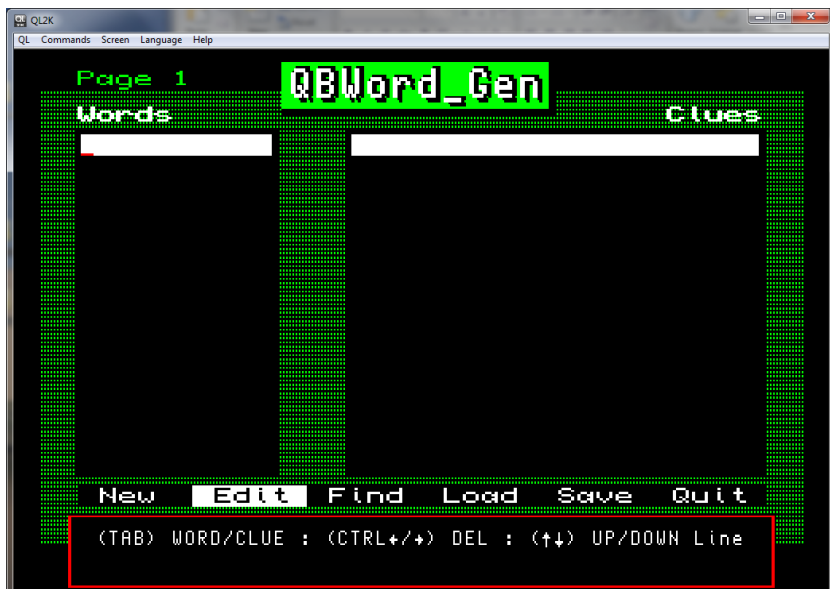
556 DEFine PROCEDURE WSave

```
558 CLS #4:INK #4,4:DIM str$(24):str$=SDR$&'Wrd_'
560 CURSOR #4,100,20:PRINT #4,'<CTRL/4> Delete character <ENTER> to quit'
562 INK #4,7:CURSOR #4,20,5:PRINT #4,'Enter Filename ':Ed_Str
564 IF 'Wrd_' INSTR str$=0 OR LEN(str$)<10:RETurn
566 DELETE str$:OPEN_NEW #8,str$:chk=96
568 FOR n=1 TO 96
570 IF Word$(n)<>":PRINT #8,Word$(n)\Clue$(n):chk=chk-1
572 END FOR n
574 CLOSE #8:IF chk=96:DELETE str$
576 END DEFine
```

580 DEFine PROCEDURE Ed_Str

```
582 lstr%=LEN(str$)
584 REPEAT Str_lp
586 CURSOR #4,150,5:PRINT #4,str$:CLS #4,4
588 lstr%=LEN(str$)
590 k$=INKEY$(#4,-1):k=CODE(k$)
592 SElect ON k
594 =48 TO 57,65 TO 90,95,97 TO 122:IF lstr%<20:str$=str$&k$
596 =194:IF lstr%>5:str$=str$(1 TO 4)&str$(5 TO lstr%-1)
598 =10:RETurn
600 END SElect
602 END REPEAT Str_lp
604 END DEFine
```

QBConundrum 2017



QBConundrum

Having obtained a copy of **QBConundrum** SuperBASIC code and loaded it and the accompanying files into a recognised QL device. Use the QDOS command LRUN, as shown:-

LRUN flp1_QBConundrum.

All being well the Conundrum Game will direct you to select and load a Wrd_file, then test your knowledge of words against the clock face countdown.

Notes on QL2K emulator

Both the **QLAY & QL2K emulators** use an application tool to create a QDOS directory file and append or delete files in it. Creating a new qlay.dir file first open a Windows **Command Prompt** (Win 7 Press Start button in *search programs and files* box type **command prompt**: Win 10 in *ask me anything* box type **command prompt**.)

Activate the command prompt window then navigate with DOS commands to the drive and Windows File Directory folder that holds your QL Files.

```
i.e C:\>chdir H:\QL\FDIR\WIN1_ H:\QL\FDIR\WIN1_>dir
```

This will list the files as a DOS directory. This needs to also contain a copy of **QLAYT-86.EXE** or **QLAY-X64.EXE** downloaded with **QLAY** or **QL2K**

At the DOS prompt now enter this command: -

```
i.e. H:\QL\FDIR\WIN1_>qlayt-x64.exe -c qlay.dir
```

This should create a directory file qlay.dir to which you can now append files. For example:-

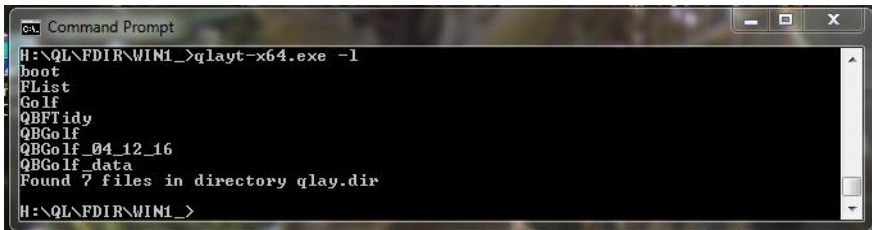
```
i.e. H:\QL\FDIR\WIN1_>qlayt-x64.exe -i Boot
```

This will append the File named '**Boot**' to the qlay.dir .

Once you have appended your files you can use the following command to list them:-

```
i.e. H:\QL\FDIR\WIN1_>qlayt-x64.exe -l
```

A list of files should now be shown contained within the qlay.dir



```
Command Prompt
H:\QL\FDIR\WIN1_>qlayt-x64.exe -l
boot
Flist
Golf
QBFTidy
QBGolf
QBGolf_04_12_16
QBGolf_data
Found 7 files in directory qlay.dir
H:\QL\FDIR\WIN1_>
```

To remove a file at the DOS prompt type:-

```
i.e. H:\QL\FDIR\WIN1_>qlayt-x64.exe -r Golf
```

This will remove the File named '**Golf**' from the qlay.dir .

Running the **QL2K emulator** the files listed in WIN1_ should now be readable by the QDOS DIR command; however these files will not be loadable or run if not compatible with the QDOS operating system you have. This even applies to QL software that does not work with or only works with certain versions of QL ROM's or with added Toolkit extensions.

