## Summary

The following software shows how to exit a loop early
in Forth.

```
\ This example demonstrates how to exit a loop early
\ using the QED-Forth assembler.
\ Mosaic Industries, Inc. 1997.

HEX
400 CONSTANT MAX.TIMES.THRU.LOOP
VARIABLE LOOP.FLAG              \ exit when this becomes zero
LOOP.FLAG ON                   \ in this example, we assume that another
                                    \ task can turn the flag off.

CODE LOOP.WITH.EXIT    ( -- )
     \ enters a loop waiting on a flag;
     \ but enforces a maximum of 1024 times through the loop before exiting.
     DEY DEY                        \ make room on data stack for timeout parameter
     MAX.TIMES.THRU.LOOP IMM LDD
     0 IND,Y STD
     BEGIN,            \ Wait for loop flag to clear
         LOOP.FLAG DROP EXT LDX
     NE WHILE,                      \ loop&wait while loop flag is set
         0 IND,Y LDD                \ D <- timeout counter
         1 IMM SUBD
         0 IND,Y STD                \ put decremented counter->stack
         2 REL BEQ                  \ exit {branch over REPEAT,} when count = 0
     REPEAT,                            ( timeout.param -- )
     INY INY                            ( -- ) \ clear data stack
     RTS
END.CODE
```

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