

BASIC listing: LEDB.BAS

```
*****
! *                                     LEDB                                     *
! *-----*
! *   Task           : Sets the various bits in the BIOS keyboard       *
! *                   : flag, causing the LEDs on the AT keyboard to     *
! *                   : flash.                                           *
! *                   : QuickBASIC and the QB.LIB must be loaded using  *
! *                   : QB /L QB                                         *
! *                   : before loading and running this file.           *
! *-----*
! *   Author          : Michael Tischer                                  *
! *   Developed on    : 06/08/91                                           *
! *   Last update     : 04/07/95                                           *
! *****
```

```
,
DECLARE SUB SetFlag (Flag AS INTEGER)
DECLARE SUB Delay (Pause AS INTEGER)
DECLARE SUB ClrFlag (Flag AS INTEGER)
```

```
'$INCLUDE: 'QB.BI'                                'Include register declarations
```

```
CONST SCRL = 16                                     'SCROLL LOCK bit
CONST NUML = 32                                     'NUM LOCK bit
CONST CAPL = 64                                     'CAPS LOCK bit
```

```
DIM Counter AS INTEGER                             'Loop counter
```

```
CLS                                                  'Clear screen
```

```
PRINT " LEDB - (c) 1988, 92 by Michael Tischer"
```

```
PRINT
```

```
PRINT " Look at the LEDs on your keyboard"
```

```

FOR Counter = 1 TO 10                                'Run through the loop 10 times
    SetFlag (CAPL)                                     'Turn CAPS on
    Delay (100)                                        'Wait 100 milliseconds
    ClrFlag (CAPL)                                     'Turn CAPS off again
    SetFlag (NUML)                                     'Turn NUM LOCK on
    Delay (100)                                        'Wait 100 milliseconds
    ClrFlag (NUML)                                     'NUM LOCK off again
    SetFlag (SCRL)                                     'Turn SCROLL LOCK on
    Delay (100)                                        'Wait 100 milliseconds
    ClrFlag (SCRL)                                     'Turn SCROLL LOCK off again
NEXT

```

```

FOR Counter = 1 TO 10                                'Run through the loop 10 times
    SetFlag (CAPL OR SCRL OR NUML)                   'Turn all three flags on
    Delay (500)                                       'Wait 500 milliseconds
    ClrFlag (CAPL OR SCRL OR NUML)                   'Turn all three flags off
    Delay (500)                                       'Wait 500 milliseconds
NEXT
END

```

```

' *****
' *  ClrFLAG : Clears a flag in the BIOS status byte.      *
' *  Input   : The flag to be cleared (see constants)      *
' *  Output  : None                                         *
' *****
'

```

```

SUB ClrFlag (Flag AS INTEGER)

```

```

DIM Register AS RegType                                'Processor registers

```

```

DEF SEG = &H40                                         'Segment address of BIOS keyboard status byte

```



```

'
SUB SetFlag (Flag AS INTEGER)

DIM Register AS RegType          'Processor registers for interrupt call

DEF SEG = &H40                    'Segment address of BIOS keyboard status byte
POKE &H17, (PEEK(&H17) OR Flag)   'OR status byte flag
Register.ax = 1 * 256             'AH = Function number: Character ready?
CALL INTERRUPT(&H16, Register, Register) 'Call BIOS keyboard interrupt

END SUB

```