E:\MCA FILES\expt 2b\EXPT2B.asm

```
;EXPT 2: Parallel port interfacing of LEDs
    ;Problem statement: 2B Flash alternate LEDs
   ; connected to port 2 by having 1 sec delay, generate delay using TIMER.
3
   ; NAME: Anil Rajpurohit
   ;BATCH: B2, ROLL NO :312046
   ;DATE OF PERFORMANCE: 11/07/18
7
8
9
            ORG 0x0000
10
11
            AGAIN: MOV P2,#0b01010101
                                          ; VALUE AT PORT2 TO GLOW ALTERNATE LED
12
                    ACALL DELAY
                                            ;DELAY of 1s
13
                    MOV P2,#0b10101010
                                           OTHER SET OF ALTERNATE LEDS GLOW
14
                     ACALL DELAY
                                             ;DELAY of 1s
15
                     SJMP AGAIN
                                             ; JUMP TO AGAIN LOOP FOR LED BLINKING
16
17
18
19
           DELAY:
                    MOV R0, #0x14
                                            ; DELAY USING TIMER
                                           ;MODE1 IS SELECTED
;INITIALISE TL0 = 0, FOR MAX COUNT
                     MOV TMOD, #0x01
20
                    MOV TL0,\#0\times00
21
               L1:
                                           ; INITIALISE TH0 = 0, FOR MAX COUNT, i.e (TH0TL0 = 0)
22
                     MOV TH0, \#0x00
                                            ;START TIMER
23
                     SETB TR0
                    JNB TF0,L2
              L2:
                                            ; WAIT UNTIL TIMER OVERFLOWS, i.e COUNTS UPTO 65535
24
                     CLR TR0
                                            ;STOP TMER
25
26
                     CLR TF0
                                            ; CLEAR
27
                     DJNZ RO,L1
                                            ; continue the above opertaions for 14 times
28
29
                     RET
30
                     END
```