

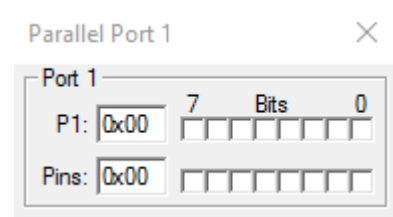
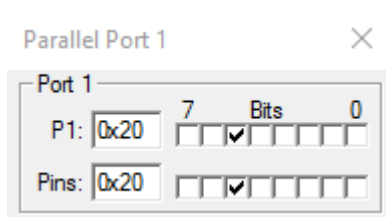
EXPERIMENT 5.1

Delay of 250 microseconds and toggle the bit P1.5 using 16 bit timer mode

Code:

```
; 250 us DELAY
; 250 us / 1.085 us = 230 and 65536 - 230 = 65306
; 65306 which in hex is FF1A H
; TL = 1A and TH = FF
    ORG 0000H
    MOV P1 , #00H ; Clearing the Port
    MOV TMOD, #10H ; Timer 1 , Mod 1
AGAIN:MOV TL1 , #1AH ; Lower byte
    MOV TH1 , #0FFH ; Higher byte
    SETB TR1        ; Start timer
BACK: JNB TF1 ,BACK ; Check timer status
    CLR TR1         ; Stop timer
    CPL P1.5        ; Compliment bit
    CLR TF1         ; Reset flag
    SJMP AGAIN      ; Reload
    END
```

Output:



The port toggles between these two states every 250us.