Experiment No: 09

BECS 31421

INTERFACING 7-SEGMENT DISPLAY

Exercise 01

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Partner Number : EC/2021/007

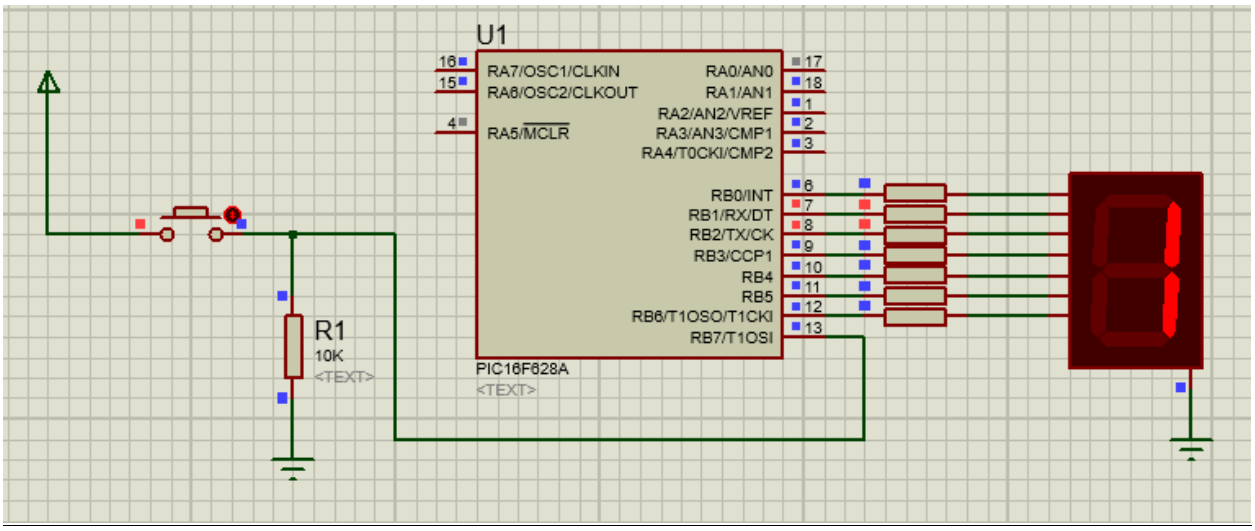
Date Performed : 30/05/2025

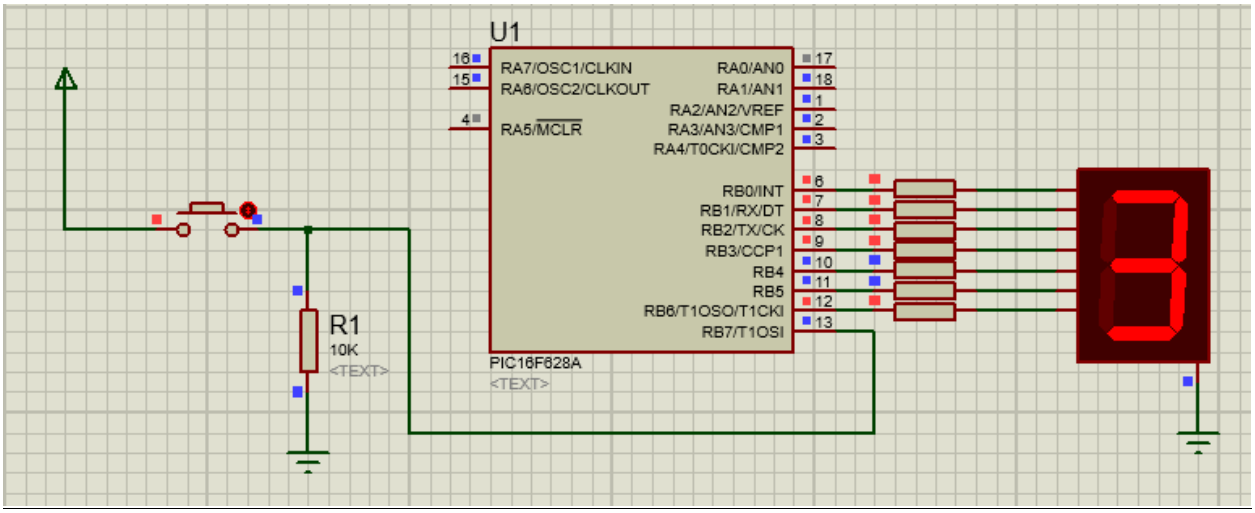
Date of Submission : 30/05/2025

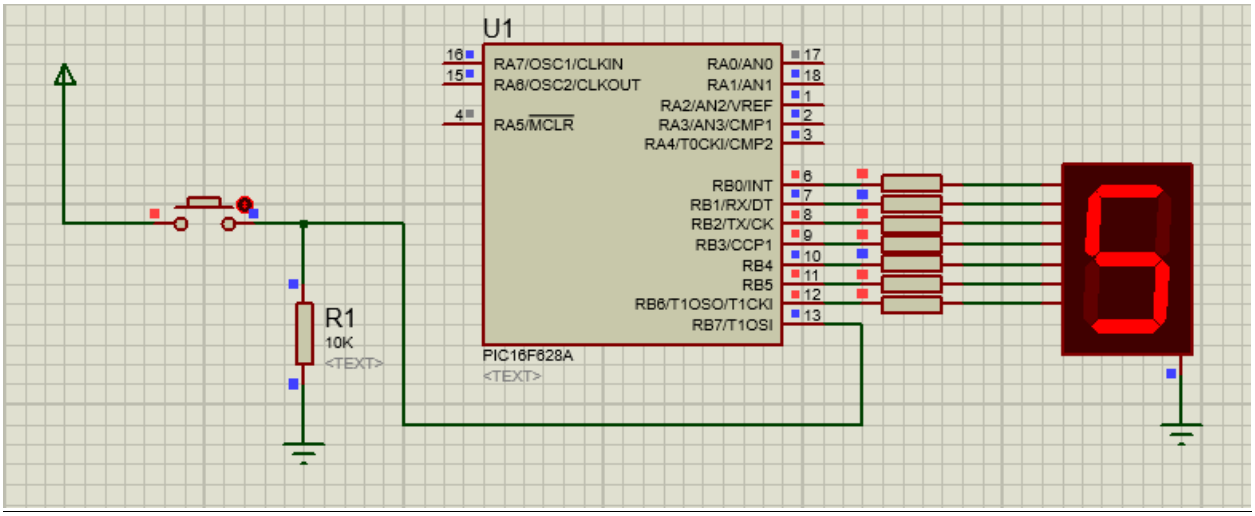
SOURCE CODE

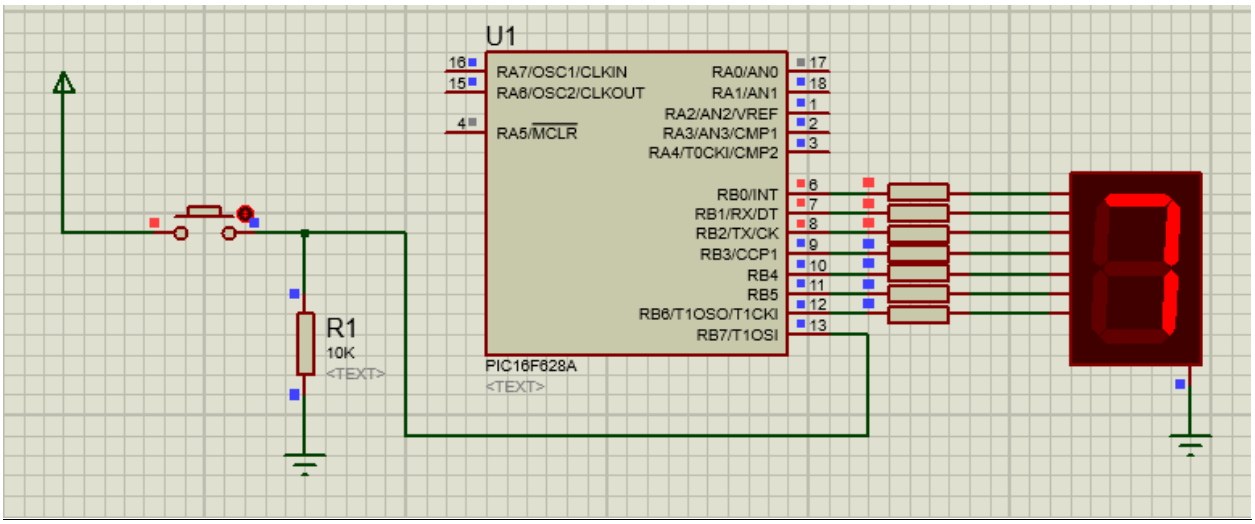
```
const unsigned char numbers[10] = {0x3F, 0x06, 0x5B, 0x4F, 0x66,0x6D, 0x7D, 0x07, 0x7F, 0x6F};


    int stop = 0;
    int count =-1;


void main(){


   TRISA = 0b00000001;
   TRISB = 0b10000000;
   PORTA = 0x00;
   PORTB = 0x00;



   while(1) {
       if(PORTB.RB7 == 1 && stop == 0){
               count=count+2;
               if(count > 9){
                     count = 1;
               }
               PORTB = numbers[count];
               stop = 1;
               Delay_ms(100);
       }
       else if (PORTB.RB7 == 0){
        stop = 0;
       }
   }
}
```

SIMULATION SCREENSHOTS






U1
RA7/OSC1/CLKIN
RA6/OSC2/CLKOUT
RA5/MCLR
RA0/AN0
RA1/AN1
RA2/AN2/VREF
RA3/AN3/CMP1
RA4/T0CKI/CMP2
RB0/INT
RB1/RX/DT
RB2/TX/CK
RB3/CCP1
RB4
RB5
RB6/T1OSO/T1CKI
RB7/T1OSI
PIC16F628A
<TEXT>
R1
10K
<TEXT>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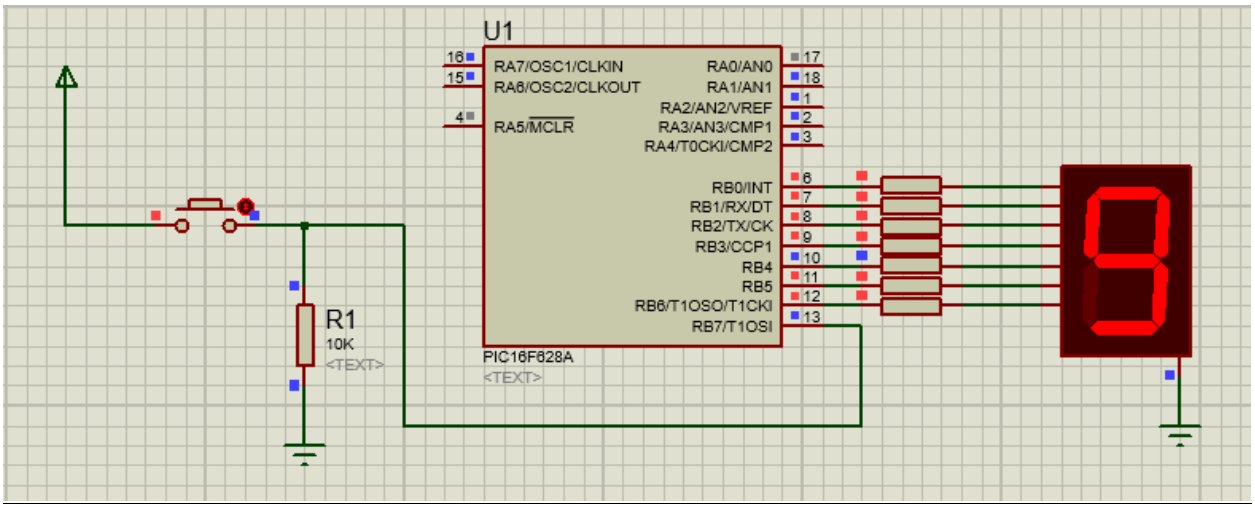
RA5/MCLR
RA0/AN0
RA1/AN1
RA2/AN2/VREF
RA3/AN3/CMP1
RA4/T0CKI/CMP2
RB0/INT
RB1/RX/DT
RB2/TX/CK
RB3/CCP1
RB4
RB5
RB6/T1OSO/T1CKI
RB7/T1OSI
PIC16F628A
<TEXT>
R1
10K
<TEXT>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RB0/INT
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RB4
RB5
RB6/T1OSO/T1CKI
RB7/T1OSI
PIC16F628A
<TEXT>
R1
10K
<TEXT>