

```

1  //when switch sw1 pressed upcounter and when sw2 pressed downcounter
2  //TILAK POOJARY
3  //NNM24EE127
4  //7/10/25
5  //EXP C
6
7  #include<MicroLABlet.h>
8  sbit controll1=P3^6;
9  sbit control2=P3^7;
10 sbit sw1=P3^4;
11 sbit sw2=P3^3;
12 sbit buzzer=P3^5;
13
14 void display(unsigned char value);
15 void main(main)
16 {
17     unsigned char counter=0;
18     P1=0x00; //set port one as output port
19     sw1=1; //switch 1 p3.4 as input port
20     sw2=1; //switch 2 p3.3 as input port
21     while(1)
22     {
23         if(sw1==1|sw2==0) //check if any one switch is pressed
24         {
25             break; //come out of loop
26         }
27         if(sw1==1) //if switch one is pressed
28         {
29             counter++; //increment counter
30             if(counter>10) //check if counter is greater than ten
31             {
32                 counter=0; // if true then set counter or reset to zero
33             }
34         }
35         if(sw2==0) //check if switch two is pressed
36         {
37             counter--; //decrement the counter
38             if(counter==0xFF) //check if counter reached FF then
39             {
40                 counter=10; //reset counter to 10
41             }
42         }
43         display(counter); //diplay the counter values there
44     }
45 }
46
47
48 void display(unsigned char value)
49 {
50     static unsigned char
51     hexcode_digit[]={0x3F,0x06,0x5B,0x4F,0x66,0x6D,0x7D,0x07,0x7F,0x6F,0x77,0x7F,0x39,0x3F,0x79,0x71};
52     static unsigned char higher_nibble,lower_nibble,fps;
53     P1=0x00; //set port 1 as output port
54     controll1=0; //set controll1 of segment one as output
55     control2=0; //set control2 of segment two as output
56     buzzer=0; //set buzzer as output
57     buzzer=1; //turn off buzzer
58
59     higher_nibble=value/10; //get higher nibble
60     lower_nibble=value%10; //get lower nibble
61     for(fps=0;fps<=50;fps++)
62     {
63         controll1=1; //dispaly one on
64         control2=0; //display two off
65         P1=hexcode_digit[higher_nibble]; //dispaly the digit
66         delay(10); //delay
67         controll1=0; //dispaly one off
68         control2=1; //display two on
69         P1=hexcode_digit[lower_nibble]; //dispaly the digit
70         delay(10); //delay
71     }
72 }

```