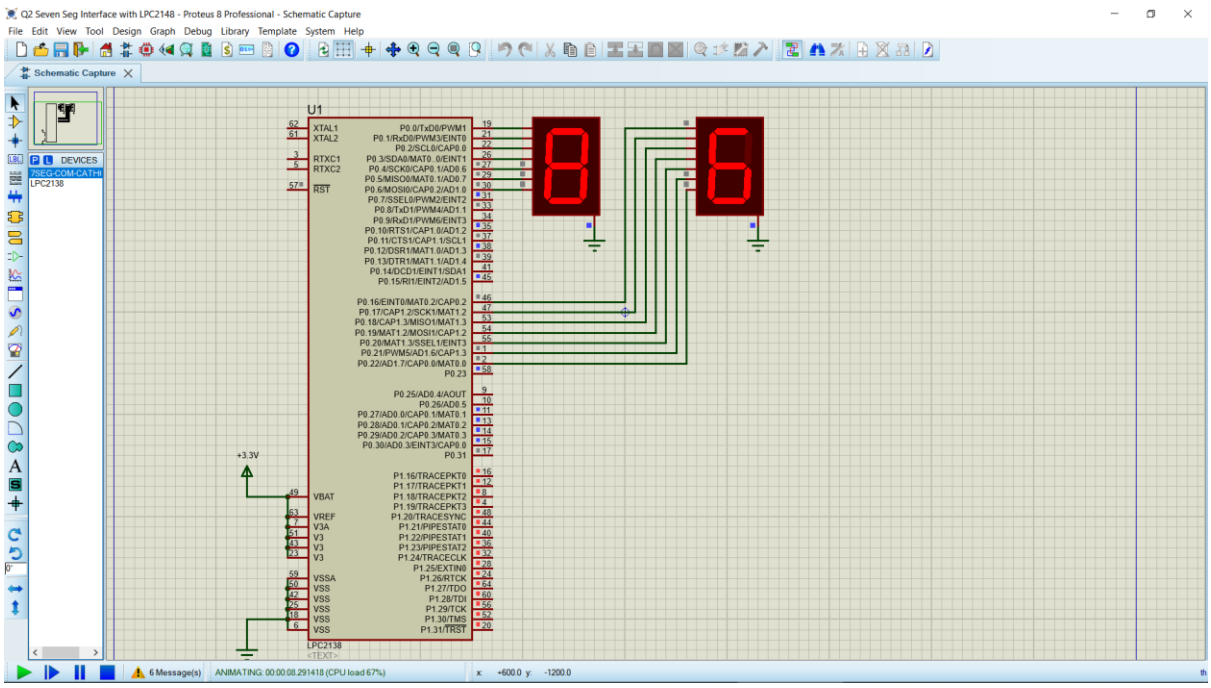
KARTHIK MN

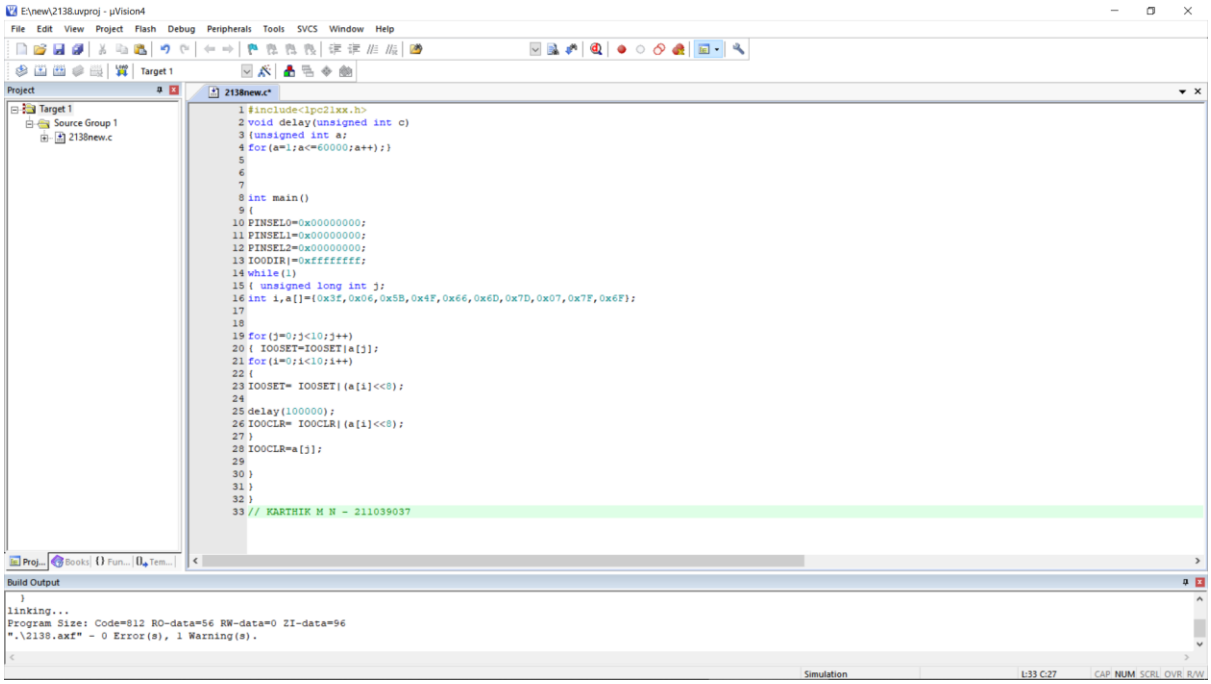
Reg no. 211039037

Q2) Implement using Proteus and Keil, for the following: (15 marks)Implement a 00-99 counter(up counter)using two 7 segment display.

```
#include<lpc21xx.h>
void delay(unsigned int c)
{unsigned int a;
for(a=1;a<=60000;a++);}



int main()
{
PINSEL0=0x00000000;
PINSEL1=0x00000000;
PINSEL2=0x00000000;
IO0DIR|=0xffffffff;
while(1)
{ unsigned long int j;
int i,a[]={0x3f,0x06,0x5B,0x4F,0x66,0x6D,0x7D,0x07,0x7F,0x6F};



for(j=0;j<10;j++)
{ IO0SET=IO0SET|a[j];
for(i=0;i<10;i++)
```

```
{
IO0SET= IO0SET|(a[i]<<8);

delay(100000);
IO0CLR= IO0CLR|(a[i]<<8);
}
IO0CLR=a[j];

}
}
}
// KARTHIK M N
```



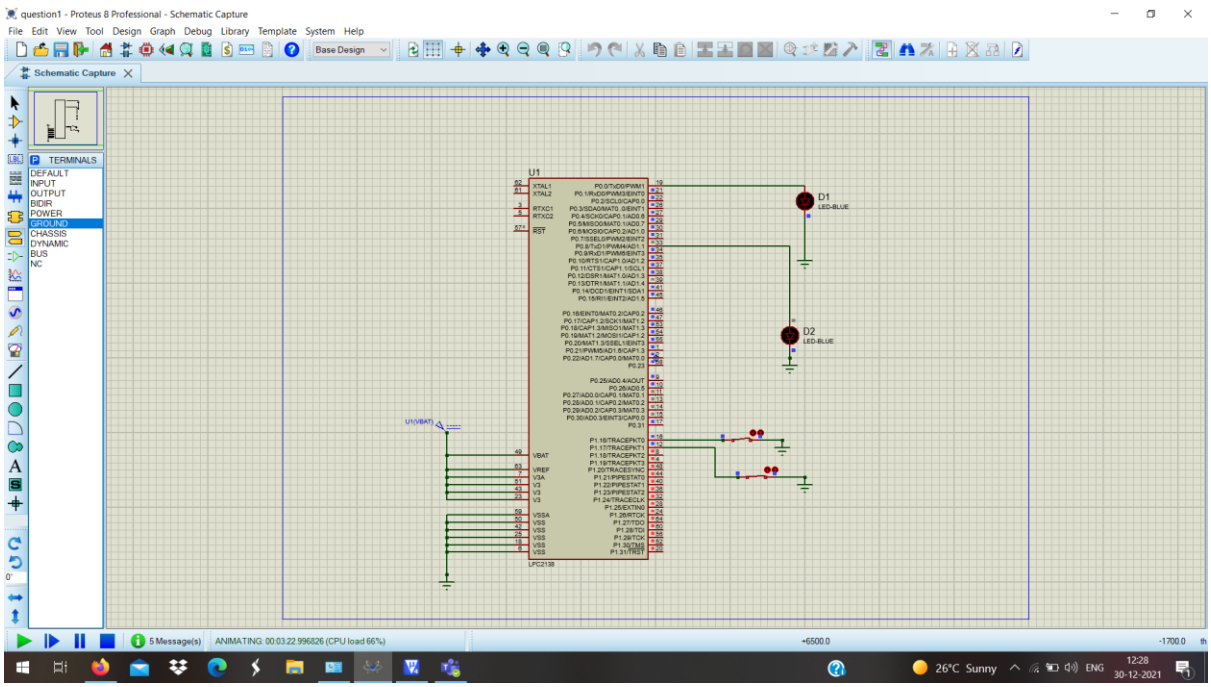


Q1) Implement using Proteus and Keil for the following:(15 marks)Connect two switches (SW1 and SW2)and two LED. On press of first switchSW1, the led1should on andoff with a delay of 1sec and other switch SW2, LED2 should be on and off at 500 ms.

```
#include<lpc214x.h>

void delay(unsigned int z);

void pll();

int main(void)

{

IO0DIR=0xffffffff;

IO1DIR = 0x0;

pll(); //Fosc=12Mhz,CCLK=60Mhz,PCLK=60MHz

while(1) {

if((IO1PIN & (1<<16)) ==0)

{
```

```
IO0SET=0x000000ff;
delay(1000); //1sec delay
IO0CLR=0x000000ff;
delay(1000);
}
if((IO1PIN & (1<<17)) ==0)
{
IO0SET=0x0000ff00;
delay(500); //500msec delay
IO0CLR=0x0000ff00;
delay(500);
}
}
}
void pll() //Fosc=12Mhz,CCLK=60Mhz,PCLK=60MHz
{
PLL0CON=0x01;
PLL0CFG=0x24;
PLL0FEED=0xaa;
PLL0FEED=0x55;
while(!(PLL0STAT&(1<<10)));
PLL0CON=0x03;
PLL0FEED=0xaa;
PLL0FEED=0x55;
VPBDIV=0x01;
}
void delay(unsigned int z)
```

```
{
T0CTCR=0x0; //Select Timer Mode
T0TCR=0x00; //Timer off
T0PR=59999; //Prescaler value for 1ms
T0TCR=0x02; //Timer reset
T0TCR=0x01; //Timer ON
while(T0TC<z);
T0TCR=0x00; //Timer OFF
T0TC=0; //Clear the TC value. This is Optional.
}
// KARTHIK M N -211039037
```



https://github.com/Karthik-mn/MCA---LAB