

<EasyArduino.h>



Library Creator

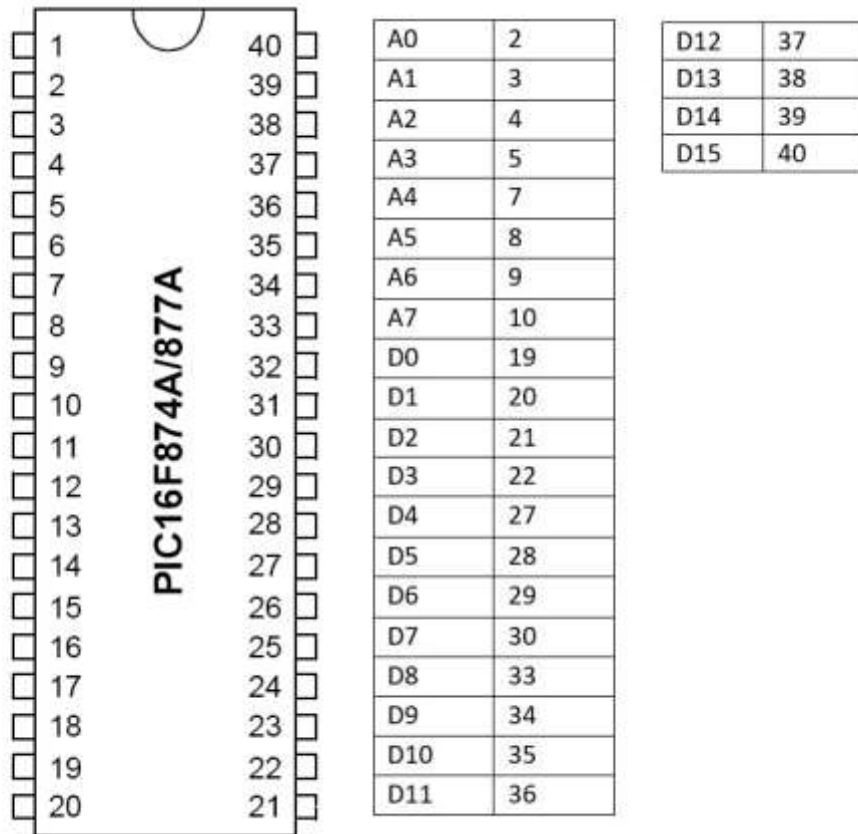
Md Hasemi Rafsan Jani Shohan

BSC in EEE

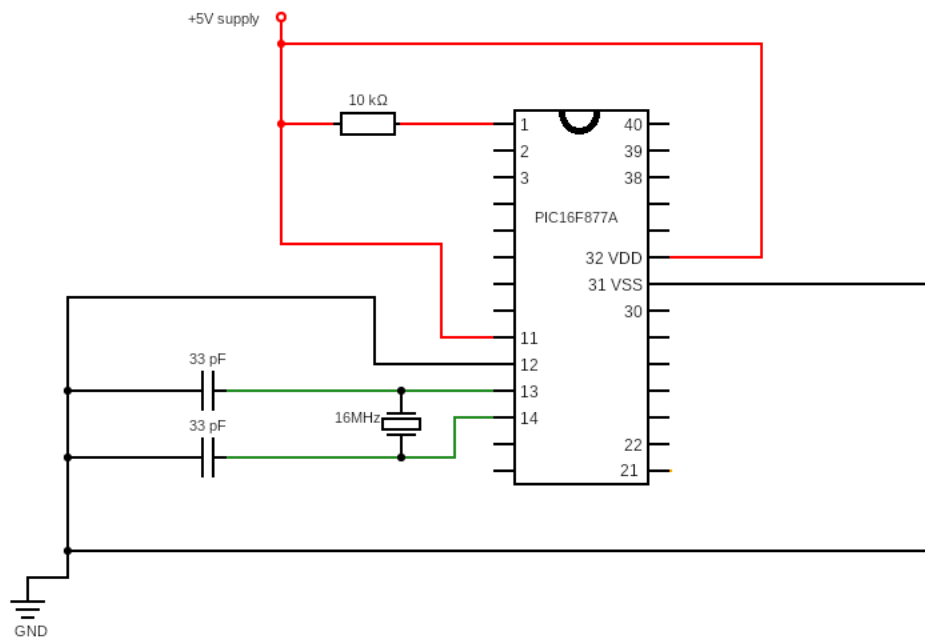
Daffodil International University

Embedded System Engineer

[Contact Click](#)



Pin Specification



Biasing 16F77A

Function parameter

- **digitalRead(D0);**
- **digitalWrite (D0,HIGH);**
- **digitalWrite (D0,LOW);**
- **analogRead(A0);**
- **Serial_print1(float);**
- **Serial_print2(integer);**
- **Serial_print3(string);**
- **map(x,min.max,min.max);**
- **constrain(x,min,max);**
- **delay(ms);**
- **max(a,b);**
- **min(a,b);**
- **voidloop()**
- **void setup()**
- **D0.....D15**
- **A0.....A7**

```
#include <16F877A.h>  
#device ADC=8  
#use delay(crystal=20Mhz)  
#include <EasyArduino.h>  
#fuses HS
```

```
void setup()  
{
```

```
voidloop()  
{  
digitalWrite(D0,HIGH);  
delay(500);  
digitalWrite(D0,LOW);  
delay(500);  
}  
}
```

//Code1: LED Blynk

#include <16F877A.h>

#device ADC=8

#use delay(crystal=20Mhz)

#include <EasyArduino.h>

#fuses HS

void setup()

{

voidloop()

{

int v = digitalRead(D8);

if(v==1)

{

digitalWrite(D0,HIGH);

}

else

{

digitalWrite(D0,LOW);

}

}

}

//Code2: Digital Input and Digital Output1

```
#include <16F877A.h>
#device ADC=8
#use delay(crystal=20Mhz)
#include <EasyArduino.h>
#fuses HS

void setup()
{
voidloop()
{
int v = digitalRead(D8);
digitalWrite(D0,v);
}
}
```

//Code3: Digital Input and Digital Output2

```
#include <16F877A.h>  
#device ADC=8  
#use delay(crystal=20Mhz)  
#include <EasyArduino.h>  
#fuses HS
```

```
void setup()
```

```
{
```

```
voidloop()
```

```
{
```

```
float v = analogRead(A0);
```

```
Serial_print1(v);
```

```
delay(5000);
```

```
}
```

```
}
```

//Code3: AnalogRead[0--1024] with Serial_print

```
#include <16F877A.h>  
#device ADC=8  
#use delay(crystal=20Mhz)  
#include <EasyArduino.h>  
#fuses HS  
  
void setup()  
{  
  
voidloop()  
{  
float v = analogRead(A0);  
v = map(v,0,1024,0,100); // 0---1024 range to set 0--100  
Serial_print1(v);  
delay(5000);  
}  
}
```

//Code4: MAP Function with Serial_print

#include <16F877A.h>

#device ADC=8

#use delay(crystal=20Mhz)

#include <EasyArduino.h>

#fuses HS

void setup()

{

voidloop()

{

float v = analogRead(A0);

v = constrain(v,0,100); // (return 0)0< v >100(return 100)

Serial_print1(v);

delay(5000);

}

}

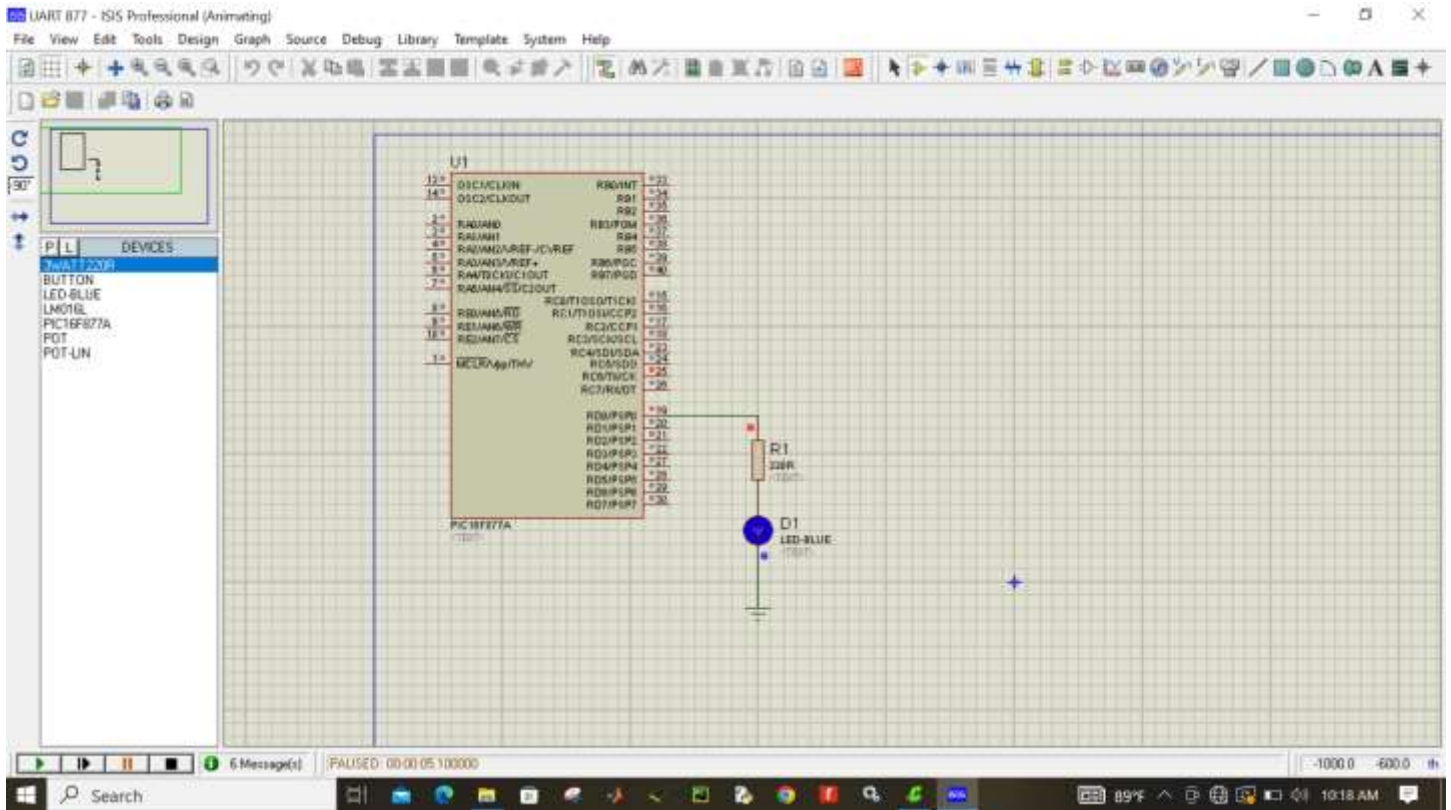
//Code5: Constrain Function with Serial_print

```
#include <16F877A.h>  
#device ADC=10  
#use delay(crystal=20Mhz)  
#include <EasyArduino.h>  
# fuses HS  
# include <lcd.c>
```

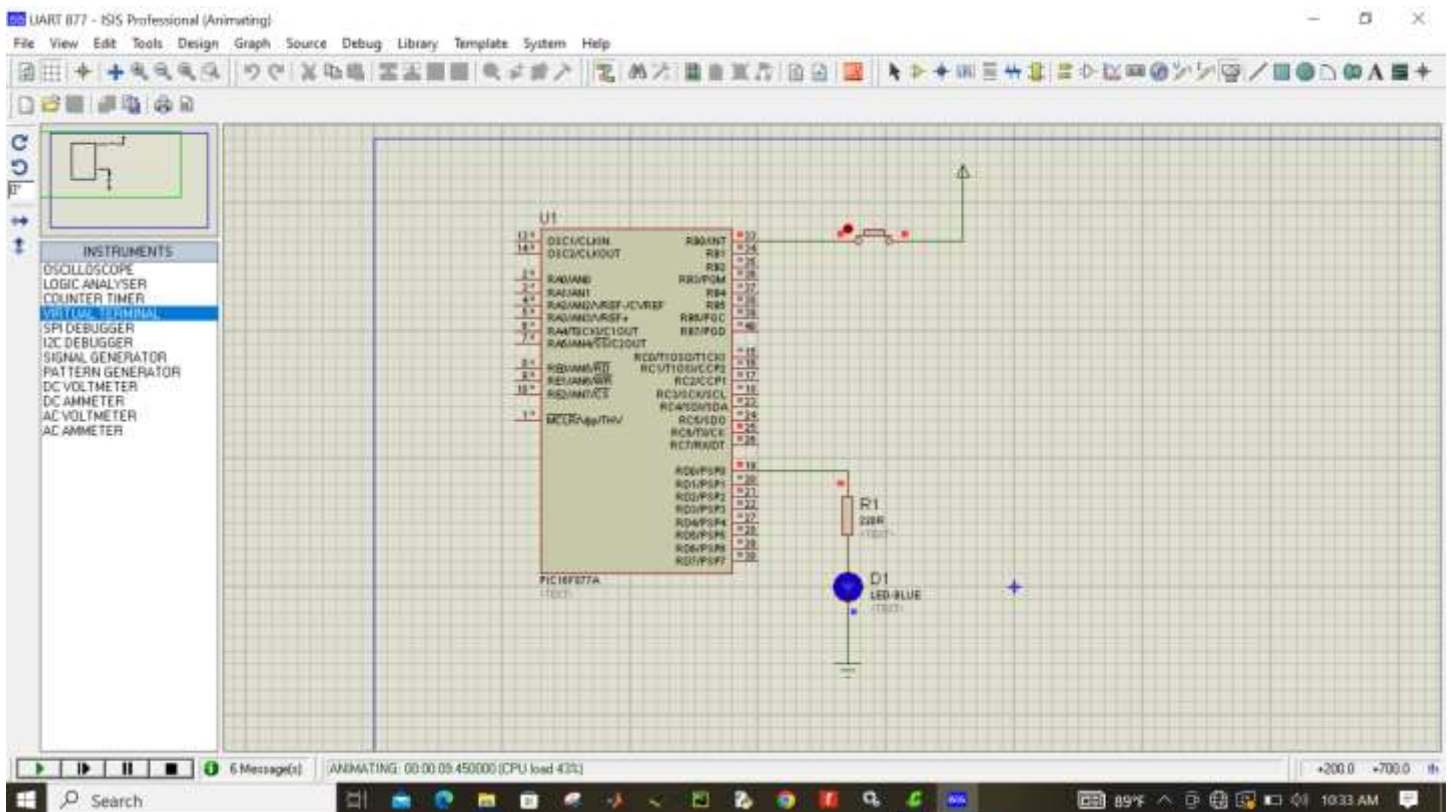
```
void main(){  
lcd_init();
```

```
while(TRUE){  
    float i = 2.22;  
    char cc[] = "abcd";  
    int in = 12;  
    //lcd_print1(i);  
    lcd_print2(in);  
    //lcd_print3(cc);  
    delay(500);  
}  
}
```

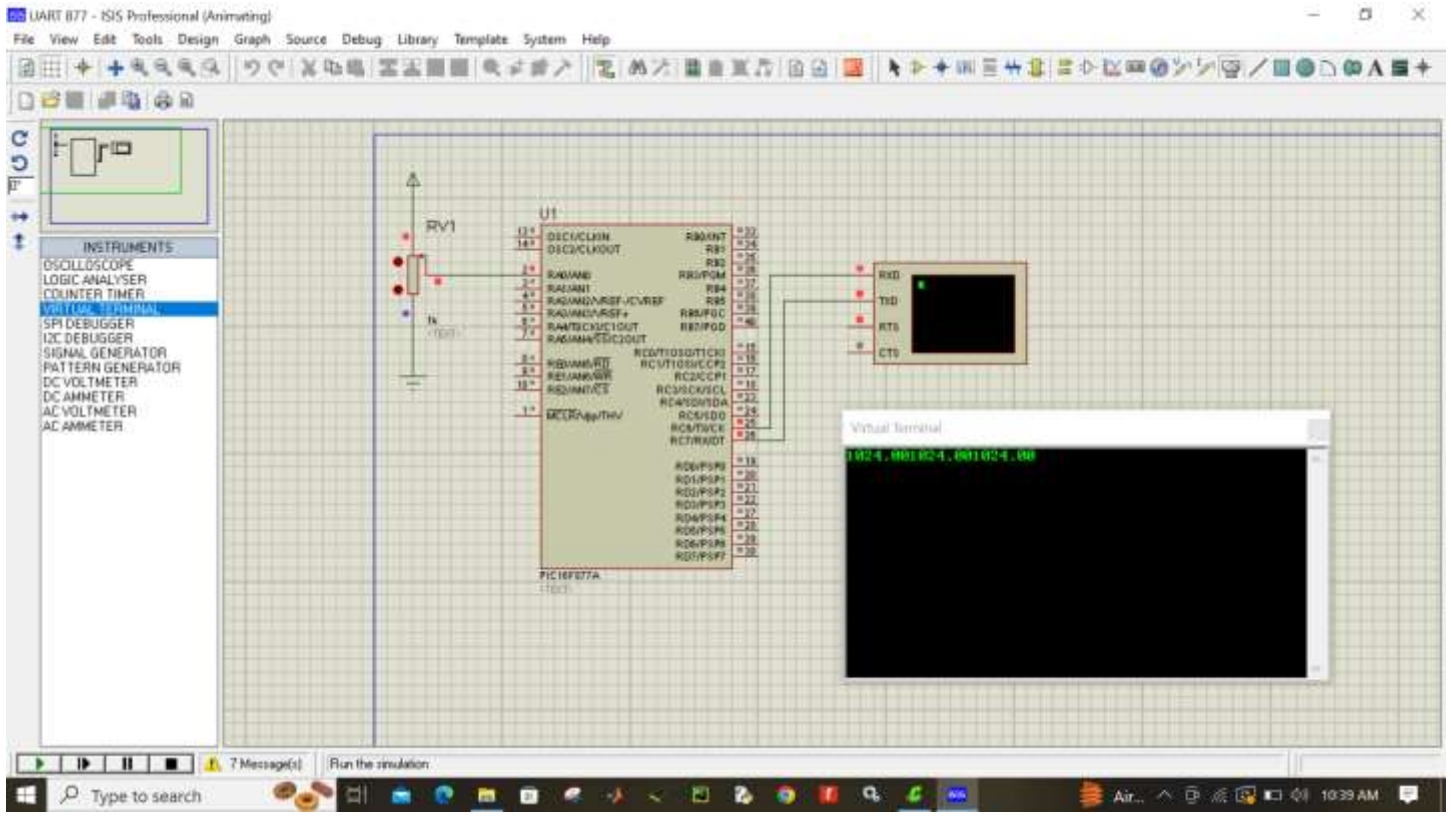
//Code6: LCD Display operating



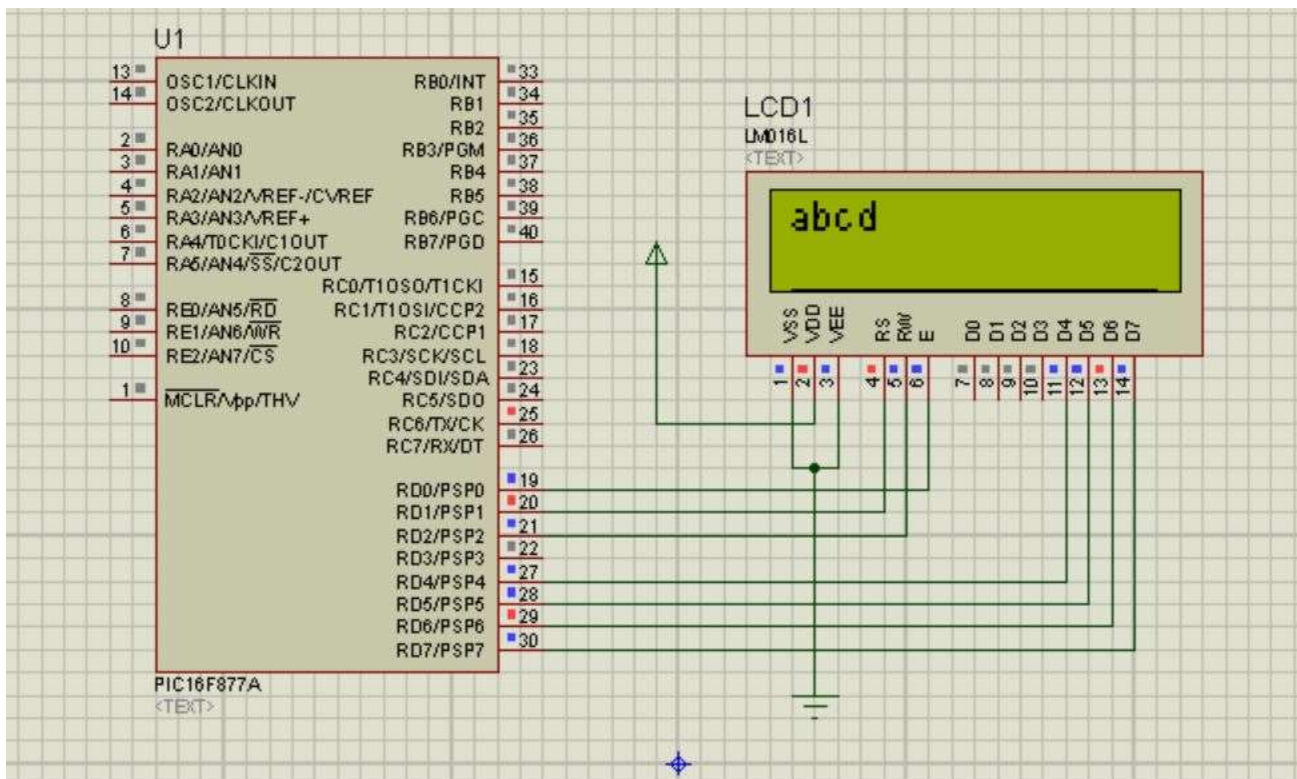
//Code1



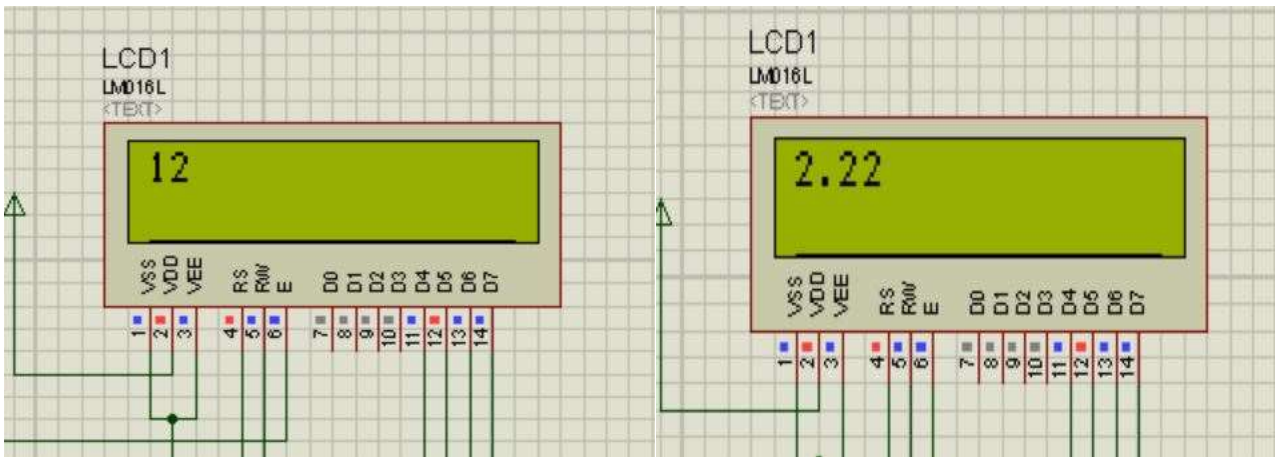
//Code2



//Code3,4,5



//Code6



//Code6

//User Instruction//

- **Use PIC 16F877A Microcontroller**
- **Use PIC C Compiler**

[Library Download Link](#)