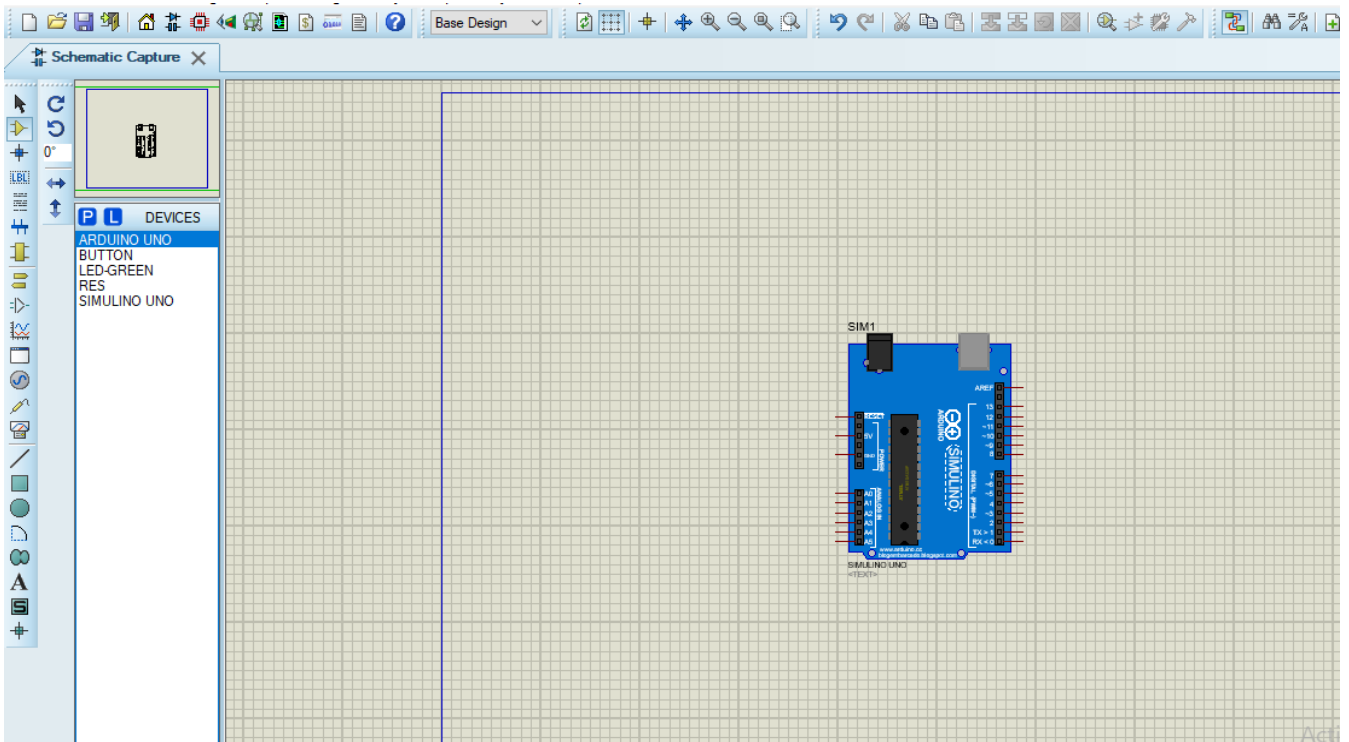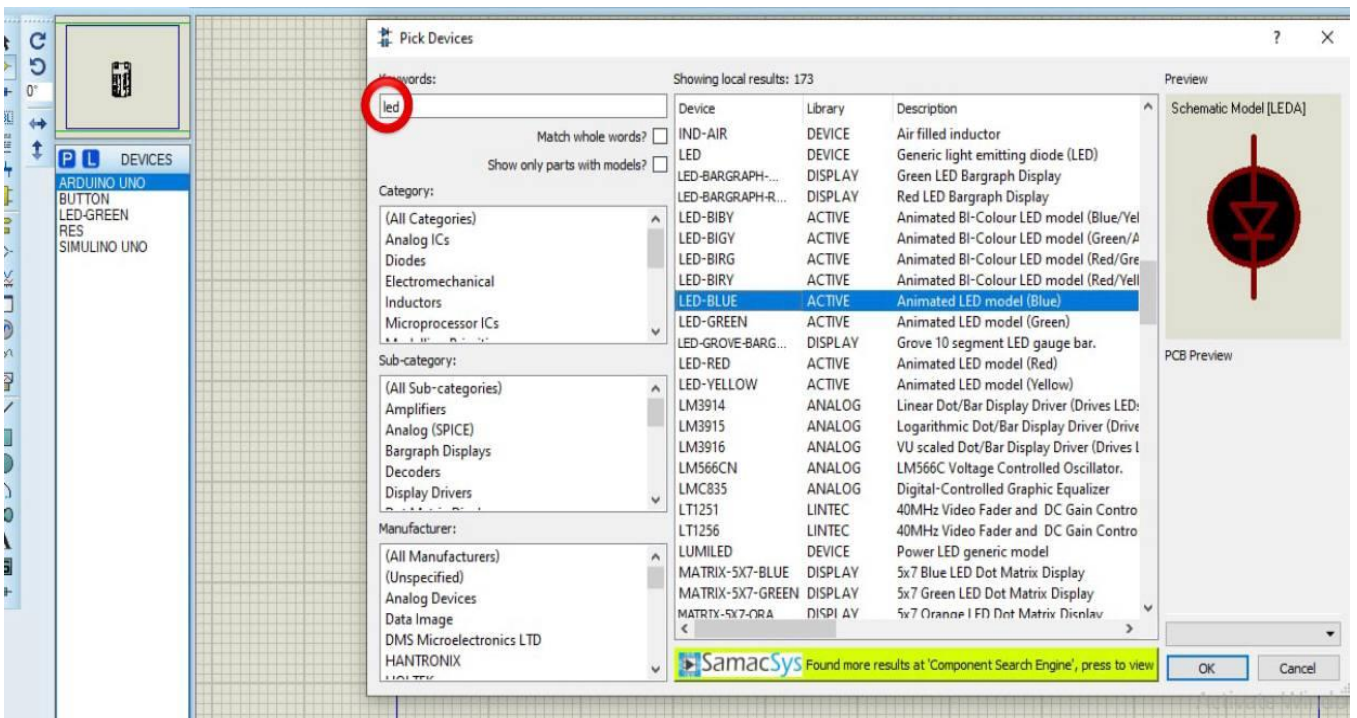# Single LED with button
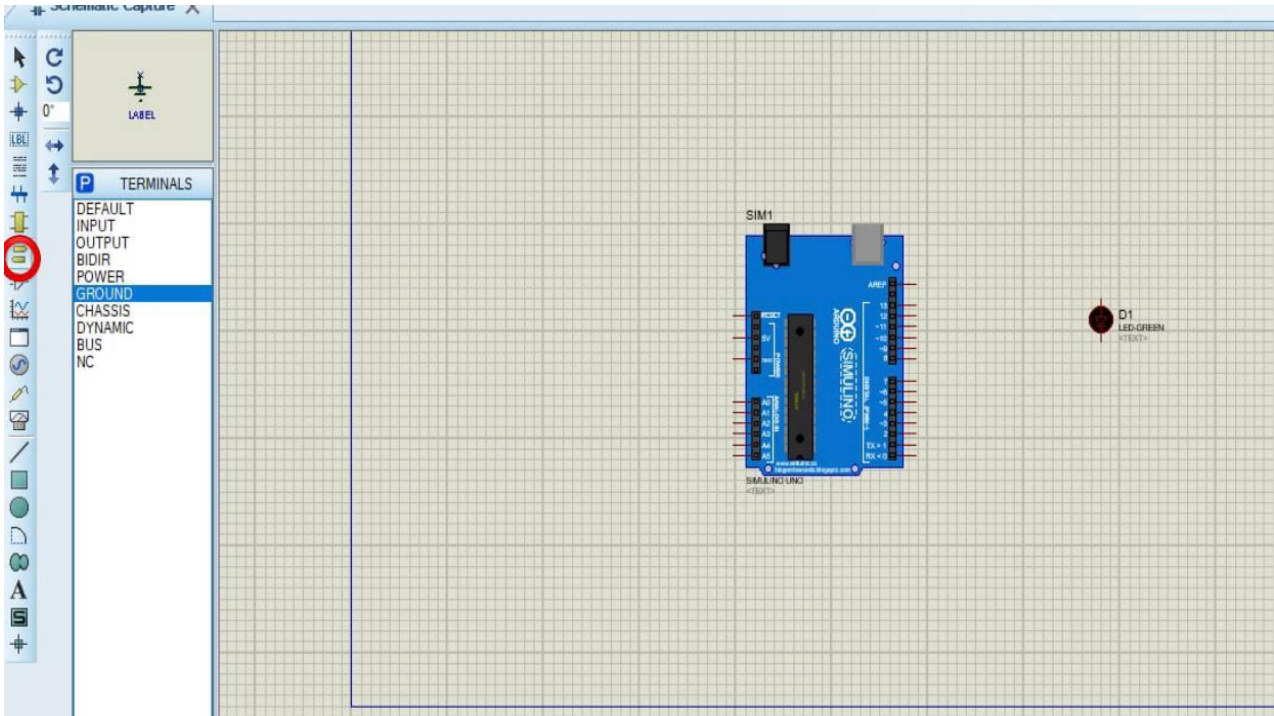
By:
Sannar Aamer
Adian Hussein

1. Open Proteus and add Arduino UNO from library.

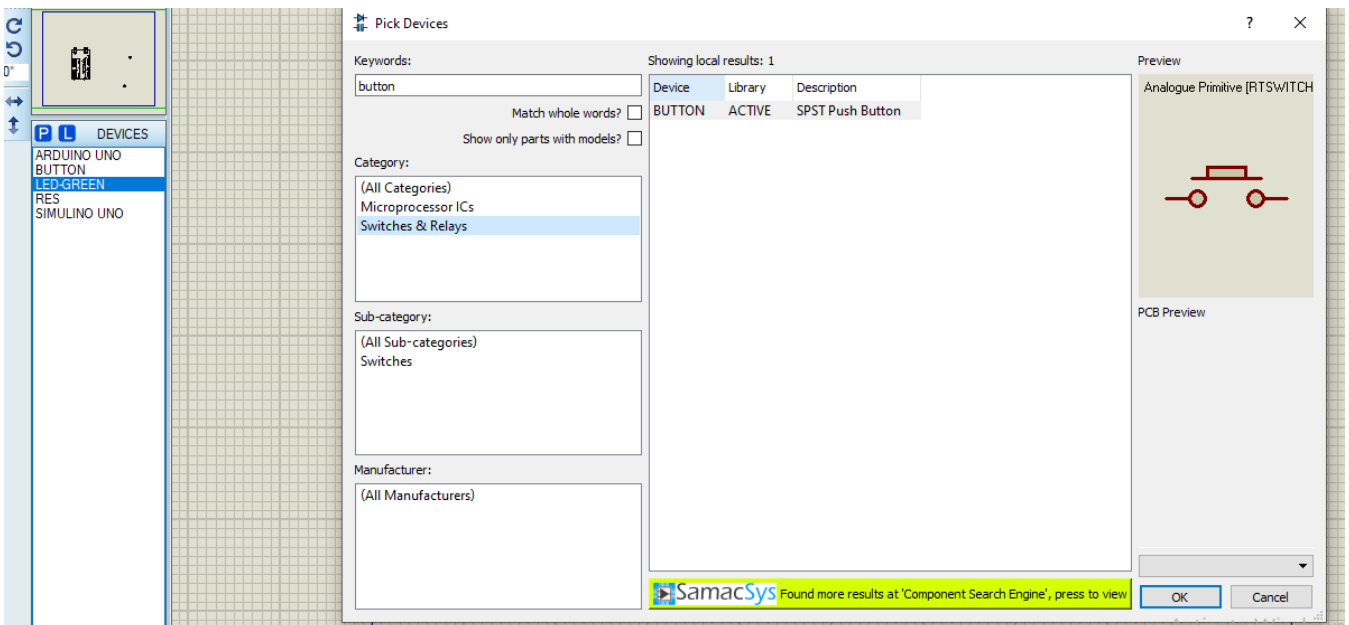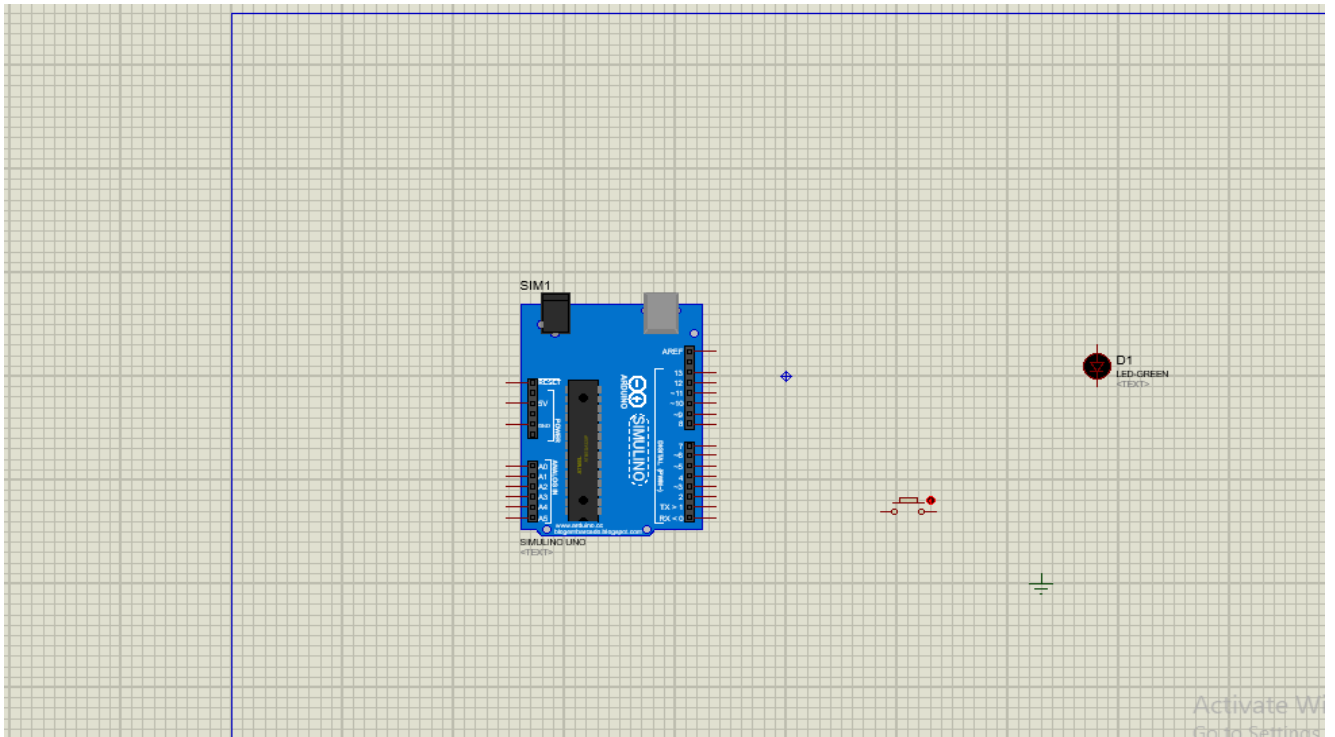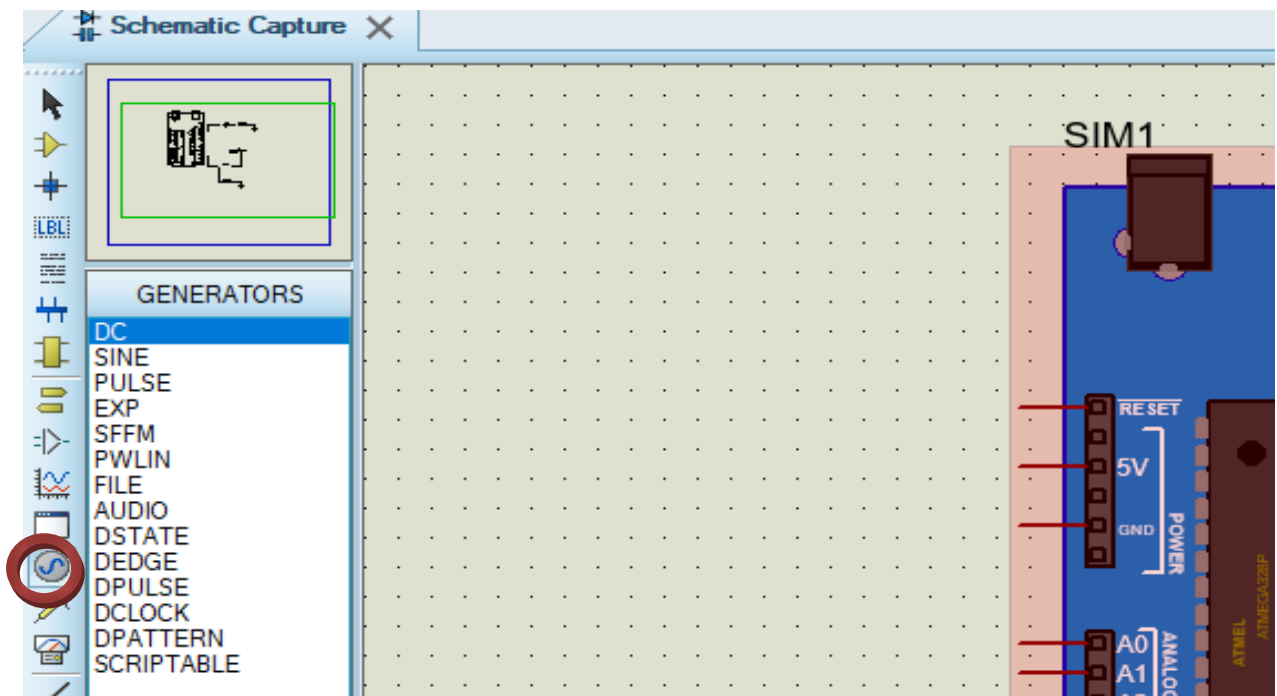## 2. Add a LED .
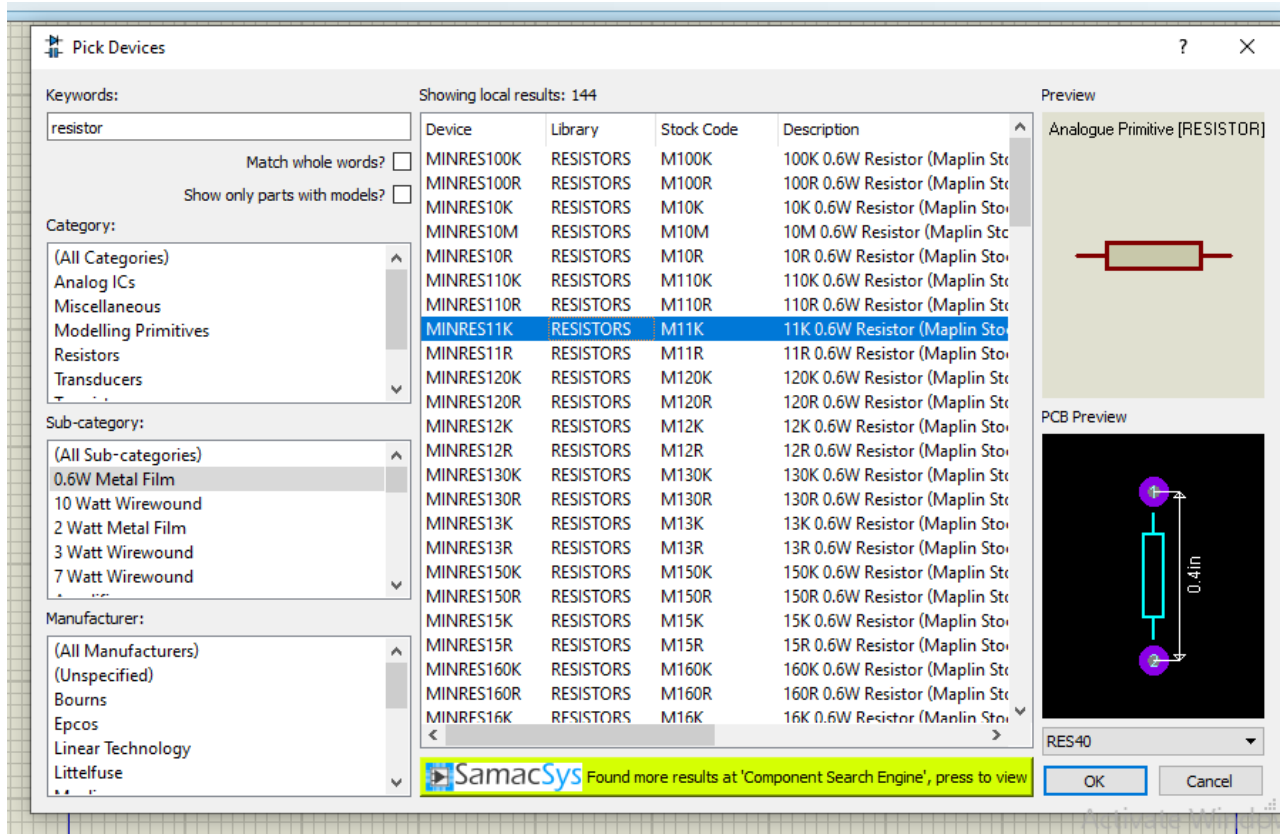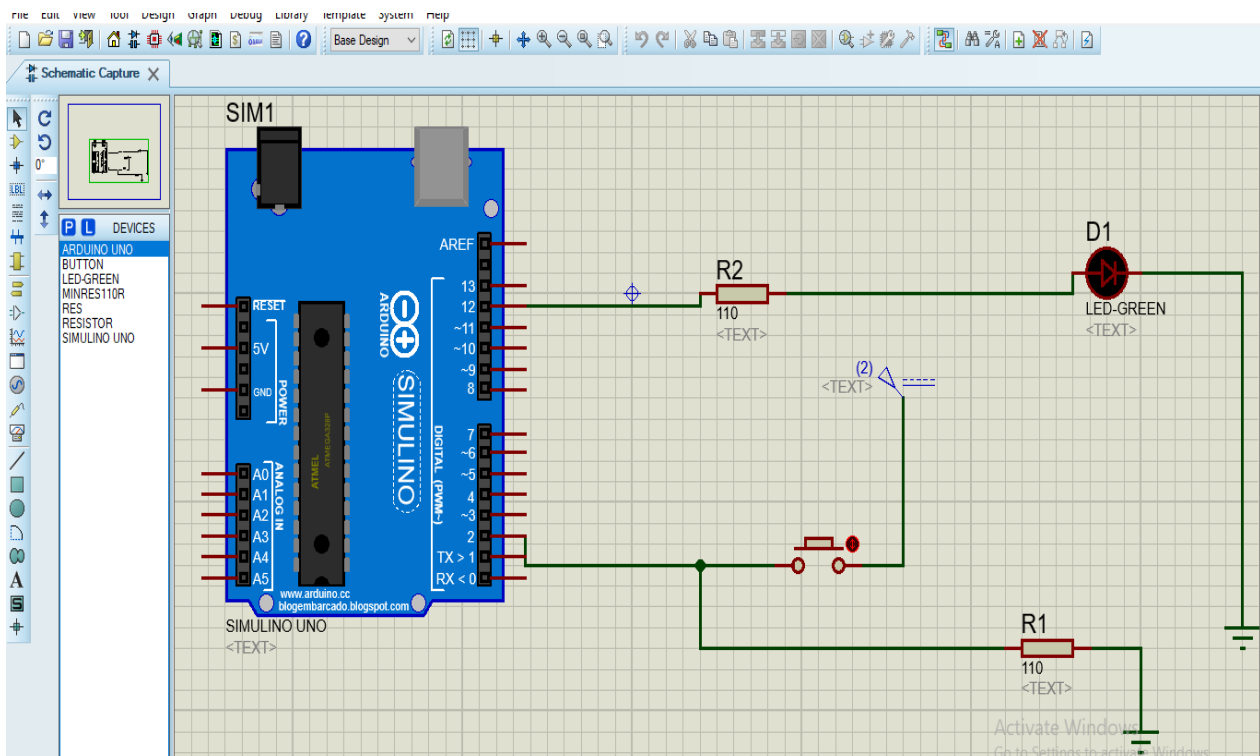
3. Add a ground .

4. Add a button.

5. Add DC generator (5v).

6. Add resistors (10k).

7. Connect the circuit as shown below.

Sketch

```
const int ledpin=12;
const int button=2;
int state =0;

void setup() {
  // put your setup code here, to run once:
pinMode(ledpin,OUTPUT);
pinMode(button,INPUT);
digitalWrite(ledpin,LOW);
}

void loop() {
  // put your main code here, to run repeatedly:
state=digitalRead(button);
if (state==1)
{
  digitalWrite(ledpin,HIGH);
}
else
{
  digitalWrite(ledpin,LOW);
}
}
```

Note: To run the code export the hex file to Proteus.