



Simulator time: 00:00:29



Code

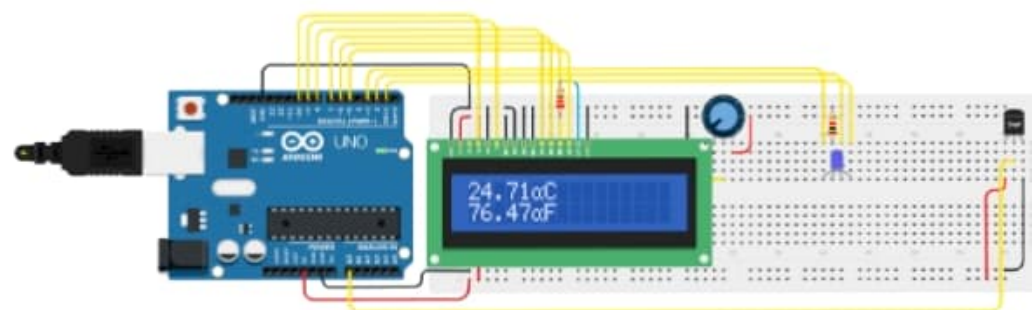


Stop Simulation

Send To



1 (Arduino Uno R3)



```
22 float temperatureC = (voltage - 0.5) * 100 / 0.001;
23 float temperatureF = (temperatureC * 9.0 / 5.0) + 32.0;
24
25 if (temperatureC >= 35.00){
26   digitalWrite(ledRedPin, HIGH);
27   digitalWrite(ledGreenPin, LOW);
28   digitalWrite(ledBluePin, LOW);
29 }else if (temperatureC >= 25.00){
30   digitalWrite(ledRedPin, LOW);
31   digitalWrite(ledGreenPin, LOW);
32   digitalWrite(ledBluePin, HIGH);
33 }
34 else if (temperatureC <= 25.00){
35   digitalWrite(ledGreenPin, HIGH);
36   digitalWrite(ledBluePin, LOW);
37   digitalWrite(ledRedPin, LOW);
38 }
39
40
41 lcd.setCursor(0, 0);
42 lcd.print(temperatureC);
43 lcd.print((char)223);
44 lcd.print("C");
45 lcd.setCursor(0, 1);
46 lcd.print(temperatureF);
47 lcd.print((char)223);
48 lcd.print("F");
49 }
```

Serial Monitor

```
#include <LiquidCrystal.h>
```

```
Int sensorPin = 0;
```

```
Int ledGreenPin = 2;
```

```
Int ledBluePin = 1;
```

```
Int ledRedPin = 3;
```

```
Const int rs = 10, en = 9, d4 = 8, d5 = 7, d6 = 6, d7 = 5;
```

```
LiquidCrystal lcd(rs, en, d4, d5, d6, d7);
```

```
Void setup() {
```

```
  Lcd.begin(16, 2);
```

```
  pinMode(ledGreenPin, OUTPUT);
```

```
  pinMode(ledBluePin, OUTPUT);
```

```
  pinMode(ledRedPin, OUTPUT);
```

```
}
```

```
Void loop() {
```

```
  Int reading = analogRead(sensorPin);
```

```
  Float voltage = reading * 5.0;
```

```
  Voltage /= 1024.0;
```

```
  Float temperatureC = (voltage - 0.5) * 100 ;
```

```
  Float temperatureF = (temperatureC * 9.0 / 5.0) + 32.0;
```

```
  If (temperatureC >= 35.00){
```

```
    digitalWrite(ledRedPin, HIGH);
```

```
    digitalWrite(ledGreenPin, LOW);
```

```
    digitalWrite(ledBluePin, LOW);
```

```
  }else if (temperatureC >= 25.00){
```

```
digitalWrite(ledRedPin, LOW);  
digitalWrite(ledGreenPin, LOW);  
digitalWrite(ledBluePin, HIGH);  
}  
Else if (temperatureC <= 25.00){  
    digitalWrite(ledGreenPin, HIGH);  
    digitalWrite(ledBluePin, LOW);  
    digitalWrite(ledRedPin, LOW);  
}
```

```
Lcd.setCursor(0, 0);  
Lcd.print(temperatureC);  
Lcd.print((char)223);  
Lcd.print("C");  
Lcd.setCursor(0, 1);  
Lcd.print(temperatureF);  
Lcd.print((char)223);  
Lcd.print("F");  
}
```