

IOT Lab - 5th Sem

Name : Rajath MK , USN : 1BM18CS079

Program No : 07

Program Title : Temperature Sensor

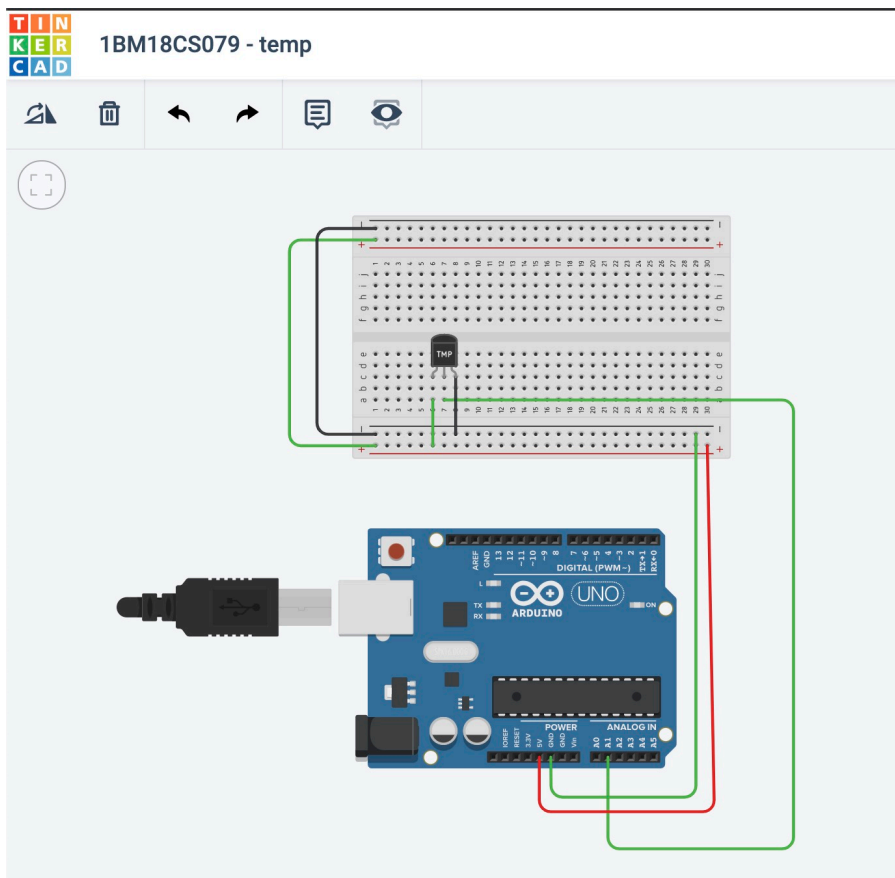
Aim :

To control the temperature output using a Temperature Sensor and Arduino Board

Hardware Required :

- Arduino Uno Board
- Resistors - 100 ohm x2
- Temperature Sensor
- Jump wires

Circuit Diagram :



Written Code :

Rajath. M.K
18M18CS079

07-Temperature Sensor - IOT LAB

```
int outputpin = 0;
void setup()
{
    serial.begin(9600);
}

void loop() {
    int rawvoltage = analogRead(outputpin);
    float millivolts = (rawvoltage / 1024) * 5000;
    float celsius = millivolts / 10;
    serial.print("celsius: ");
    serial.print(celsius);
    serial.print(" Fahrenheit");
    serial.print((celsius * 9) / 5 + 32);
    delay(1000);
}
```

Observation / Output :

The Value of the temperature in the serial monitor fluctuated according to the change in the temperature made using the temperature control slider in the simulator.



Serial Monitor

```
377.93
Fahrenheit:
712.27
Celsius:
30.76
Fahrenheit:
87.37
Celsius:
339.36
Fahrenheit:
642.84
Celsius:
24.41
```