

Program no____5_____

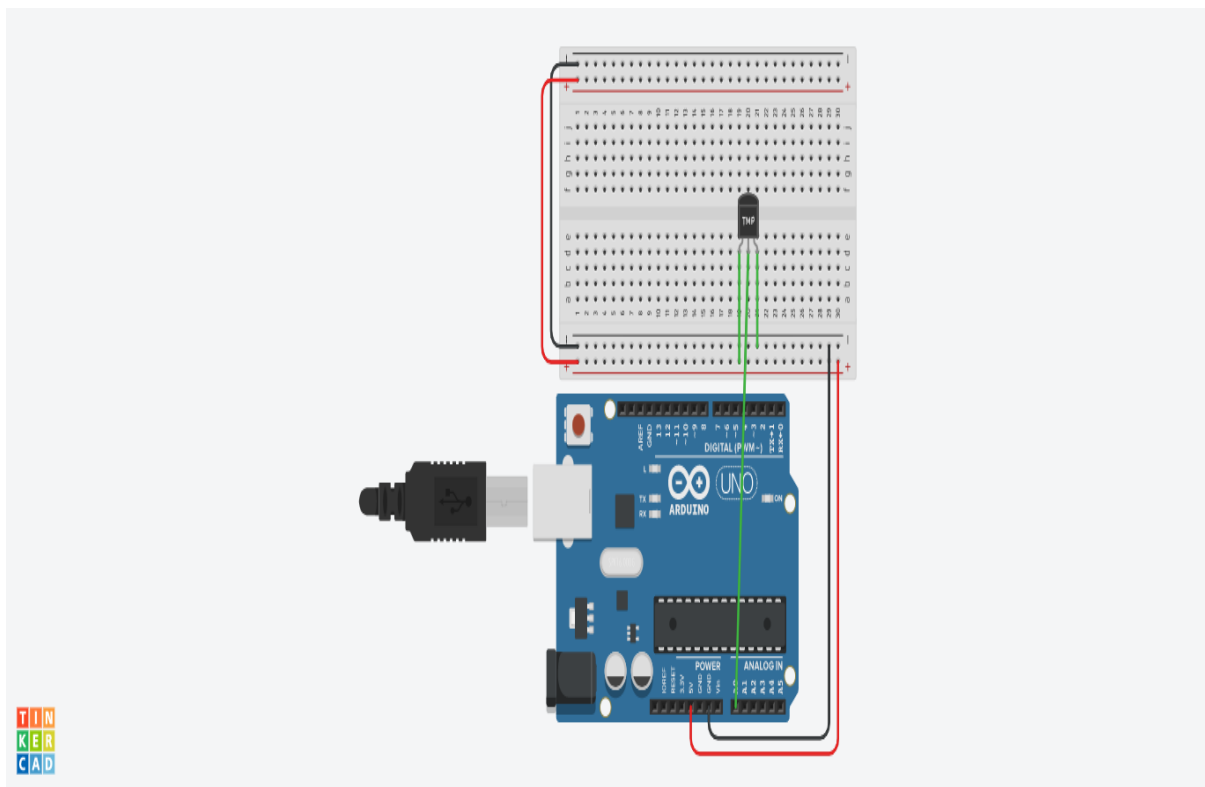
Program Title____Temperature sensor_____

Aim Converts degree in Celsius to Fahrenheit

Hardware Required

- Arduino Board
Temperature sensor(TM36)

Circuit Diagram



CODE:

Abhishek.R
IBM19CS400

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Program TEMP

Coder

```
int outputPin = 0;
void setup()
{
    Serial.begin(9600);
}
void loop()
{
    int rawVoltage = analogRead(outputPin);
    float millivolts = (rawVoltage / 1240.0) * 5000;
    float celsius = millivolts / 10;
    Serial.print(celsius);
    Serial.print("\n celsius");
    Serial.print((celsius * 9) / 5 + 32);
    Serial.print("\n Fahrenheit");
    delay(1000);
}
```

Abhishek.R

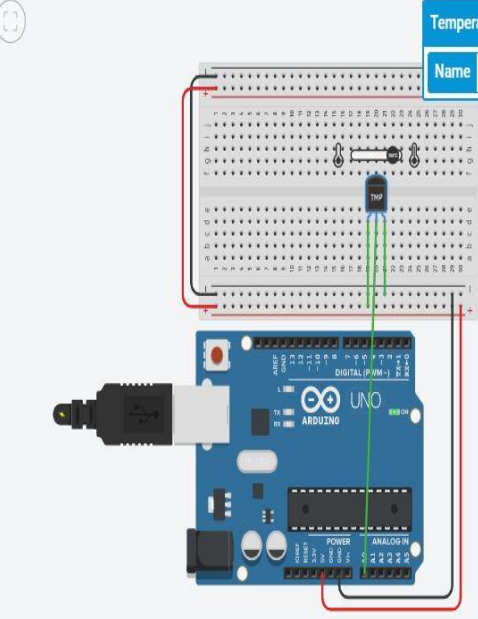
Observation /Output

converts degree in Celsius to Fahrenheit

1BM19CS400_TEMP

Simulator time: 00:00:04

Temperature Sensor [TMP36]
Name 1



```
1 int outputpin=0;
2 void setup()
3 { Serial.begin(9600);
4 }
5 }
6
7 void loop()
8 { int rawvoltage=analogRead(outputpin);
9   float millivolts=(rawvoltage/1240.0)*5000;
10  float celcius=millivolts/10;
11  Serial.print(celcius);
12  Serial.print("\nCelcius ");
13  Serial.print((celcius*9)/5 + 32);
14  Serial.print("\nFahrenheit ");
15  delay(1000);
16 }
```

Serial Monitor

```
celcius 143.05
Fahrenheit 61.69
celcius 143.05
Fahrenheit 127.02
celcius 260.63
Fahrenheit 127.02
celcius 260.63
Fahrenheit
```

Send Clear