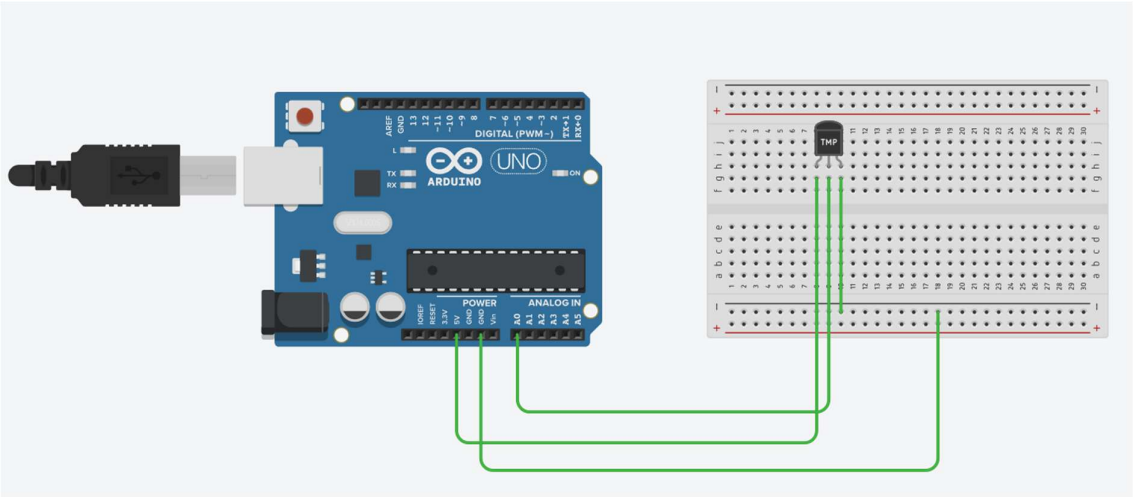
```
// Define the analog pin for the TMP36 sensor
const int tempSensorPin = A0;

// Variables to store max and min temperatures
float maxTempC = -1000.0;  // Start with a very low initial value
float minTempC = 1000.0;   // Start with a very high initial value

void setup() {
  // Initialize serial communication for output to Serial Monitor
  Serial.begin(9600);
  Serial.println("Reading temperature values...");
}

void loop() {
  // Read the analog value from the TMP36 sensor
  int sensorValue = analogRead(tempSensorPin);

  // Convert the analog reading to voltage
  float voltage = sensorValue * (5.0 / 1023.0);

  // Convert voltage to temperature in Celsius
  float temperatureC = (voltage - 0.5) * 100.0;

  // Convert temperature to Fahrenheit
  float temperatureF = (temperatureC * 9.0 / 5.0) + 32.0;

  // Update max and min temperatures
  if (temperatureC > maxTempC) {
    maxTempC = temperatureC;
  }
  if (temperatureC < minTempC) {
```

```
  minTempC = temperatureC;
 }

 // Display the temperatures in the Serial Monitor
 Serial.print("Temperature: ");
 Serial.print(temperatureC);
 Serial.print(" °C / ");
 Serial.print(temperatureF);
 Serial.println(" °F");

 Serial.print("Max Temperature: ");
 Serial.print(maxTempC);
 Serial.println(" °C");

 Serial.print("Min Temperature: ");
 Serial.print(minTempC);
 Serial.println(" °C");

 Serial.println("--------------------------");  // Divider for readability

 // Wait 1 second before the next reading
 delay(1000);
}
```


TMP
ARDUINO
UNO
DIGITAL (PWM~)
POWER
ANALOG IN