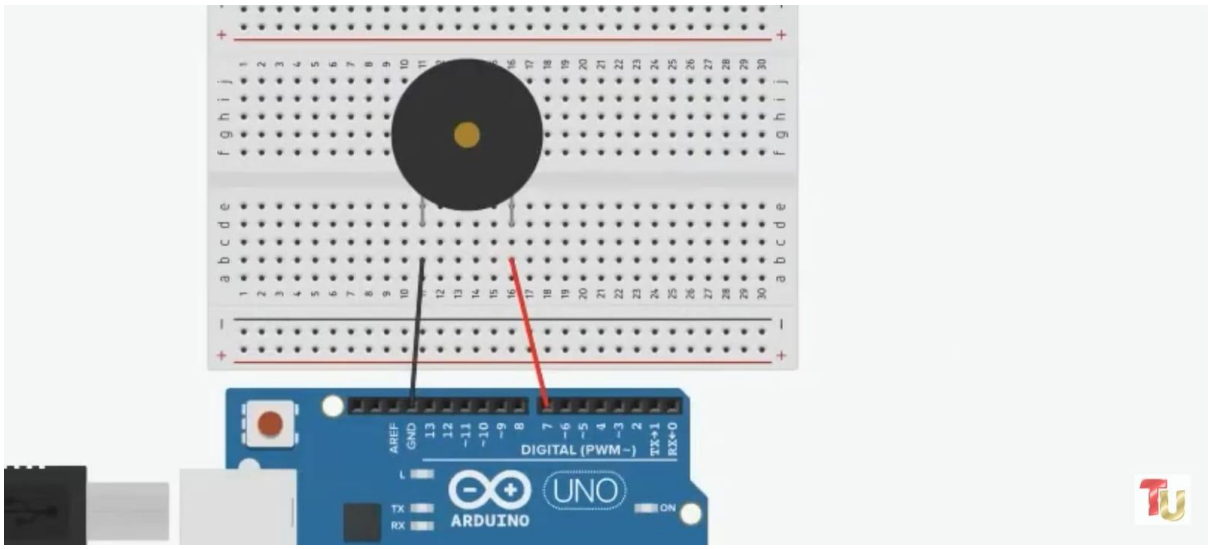
Temperature Threshold and Buzzer

```
// Temperature Alert System using Arduino and LM35 Sensor
// LM35 OUT pin -> A0
// Buzzer -> pin 8
// Vcc -> 5V, GND -> GND

const int sensorPin = A0;   // LM35 output pin connected to A0
const int buzzerPin = 8;    // Buzzer connected to digital pin 8
float temperature;          // Variable to store temperature
const float threshold = 30.0;  // Temperature limit in °C (you can change it)

void setup() {
  Serial.begin(9600);       // Start serial monitor
  pinMode(sensorPin, INPUT); // Sensor as input
  pinMode(buzzerPin, OUTPUT);// Buzzer as output
  Serial.println("Temperature Monitoring System Started");
}

void loop() {
  int sensorValue = analogRead(sensorPin);   // Read LM35 analog output
  temperature = (sensorValue * 5.0 * 100.0) / 1024.0; // Convert to °C

  Serial.print("Temperature: ");
```

```
  Serial.print(temperature);
  Serial.println(" °C");

  if (temperature > threshold) {
    digitalWrite(buzzerPin, HIGH);  // Turn ON buzzer if above threshold
    Serial.println(" ⚠️ Alert! Temperature too high!");
  }
  else {
    digitalWrite(buzzerPin, LOW);   // Turn OFF buzzer
  }

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

Connections:



LM35 VCC	**5V**	**Power**
LM35 GND	**GND**	**Ground**
LM35 OUT	**A0**	**Analog temperature output**
Buzzer (+)	**Pin 8**	**Control from Arduino**
Buzzer (–)	**GND**	**Common ground**