

```

int baselineTemp = 0;
int celsius = 0;
void setup()
{
    pinMode(A0, INPUT);
    Serial.begin (9600);
    pinMode(13, OUTPUT);
    pinMode(12, INPUT);
    pinMode(2, OUTPUT);
    pinMode(4, OUTPUT);
}
void loop()
{
    baselineTemp = 40;
    celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);
    Serial.print(celsius);
    Serial.print(" \n");
    long duration, distance;
    digitalWrite(13, LOW);
    delayMicroseconds(2);
    digitalWrite(13, HIGH);
    delayMicroseconds(10);
    digitalWrite(13, LOW);
    duration = pulseIn(12, HIGH);
    distance = (duration/2) / 29.1;
    if (distance >= 200 || distance <= 0 && celsius < baselineTemp)
    {
        digitalWrite(2, LOW);
        Serial.println("Out of range");
    }
    else

```

```

{
  Serial.print(distance);
  Serial.println(" cm \n");
  digitalWrite(2,HIGH);
  Serial.print("LED ON");
  tone(4, 220, 100);
  delay(500);

}
delay(500);
}

```

