**ASSIGNMENT 1**

Date: 12.09.2022 V. Giri Prasath

312419106040

Create a circuit with piezo alarm, PIR sensor, Temperature sensor consisting following features

# 1. Alarm when temperature is above 60 degree celcius, and

# 2. Alarm when motion detected using Passive Infrared sensor

**PROGRAM:**

// C++ code

int pir, buzz;

float temp;

void setup()

{

pir = 3;

buzz = 12;

pinMode(pir, INPUT);

pinMode(buzz, OUTPUT);

Serial.begin(9600);

}

void loop()

{

//Motion Monitoring

int motion = digitalRead(pir);

if(motion == 1)

{

tone(buzz,50);

Serial.println("Motion Status: Detected");

delay(50);

}

else

{

noTone(buzz);

Serial.println("Motion Status: Not Detected");

}

//Temperature Measurement

float data = analogRead(A4);

float temp =(((data/1024.0)\*5)\*100);

Serial.print("Temperature is:");

Serial.println(temp);

if(temp>60)

{

tone(buzz,200,200);

delay(500);

}

else{

noTone(buzz);

}

}

**OUTPUT:**







