IBM IOT Assignment 1: Interface piezo alarm with 2 sensor:PIR sensor and temperature sensor, use these sensors along with piezo buzzer and write simple logic that the piezo alarm operates whenever the temperature is above 60 degree centigrade and when ever the motion is detected.

Code:

Int baseline Temp=0;

Int Celsius=0;

Int motion=digitalRead(2);

Void setup()

{

pinMode(A0, INPUT);

pinMode(2, INPUT);

serial.begin(9600);

pinMode(13, OUTPUT);

}

Void loop()

{

baselineTemp=60; celsius =map(((analog Read(13)-20\*3.04),0, 1023, -40,125);

if (celsius < baselineTemp)

{ digitalWrite(13, LOW);

}

if (celsius > baselineTemp)

{ digitalWrite(13, HIGH);

for(int freq=0;freq<=30000;freq++)

tone(13, freq);

delay(1000);

noTone(12);

delay(500);

}

if (motion==1)

{

digitalWrite(13, HIGH);

for(int freq=0;freq<=30000;freq++)

tone(13, freq);

delay(1000);

noTone(12);

delay(500);

}

}