

PROGRAM:

void setup(){

Serial.begin(9600);

pinMode(13,INPUT);

pinMode(12,OUTPUT);

}

void loop(){

double data=analogRead(A2);

double n=data/1024;

double volt=n\*5;

double off=volt-0.5;

double temperature=off\*100;

int motion=digitalRead(13);

for(int freq=4;freq<=5;freq++){

if(temperature>=60){

Serial.println("Temperature is above 60");

tone(12,freq);

delay(100);

}

else{

Serial.println("Temperature is below 60");

noTone(12);

}

}

for(int freq=2;freq<=3;freq++){

if(motion==1){

Serial.println("Motion Detected");

tone(12,freq);

delay(200);

}

else{

Serial.println(" No Motion");

noTone(12);

}

}

}