



## PROGRAM CODE:

```
void setup()
{
  Serial.begin(9600);
  pinMode(12,OUTPUT);
  pinMode(2,INPUT);
}
```

```
void loop()
{
  int motion=digitalRead(2);
```

```
double data=analogRead(A0);
double n=data/1024;
Serial.print("Converted Analog Data: ");
Serial.println(n);
double volt=n*5; //because connected to
5v
Serial.print("Voltage data: ");
Serial.println(volt);
double off=volt-0.5;
Serial.print("Offset Data: ");
Serial.println(off);
double temperature=off*100;
Serial.print("Temperature Data: ");
Serial.println(temperature);
if(motion==1 && temperature<60)
    tone(12,100);
else if(motion==0 && temperature>60)
    tone(12,200);
else if(motion==1 && temperature>60)
    noTone(12);
else if(motion==0 && temperature<60)
```

noTone(12);

}

OUTPUT:



