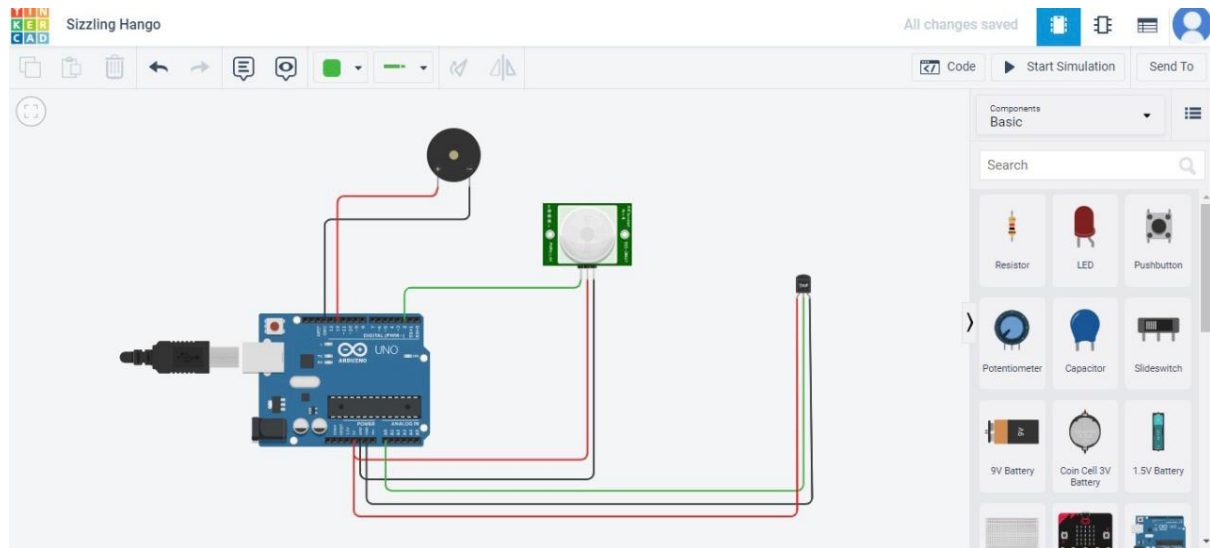


CIRCUIT CONNECTIONS:



PROGRAM:

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

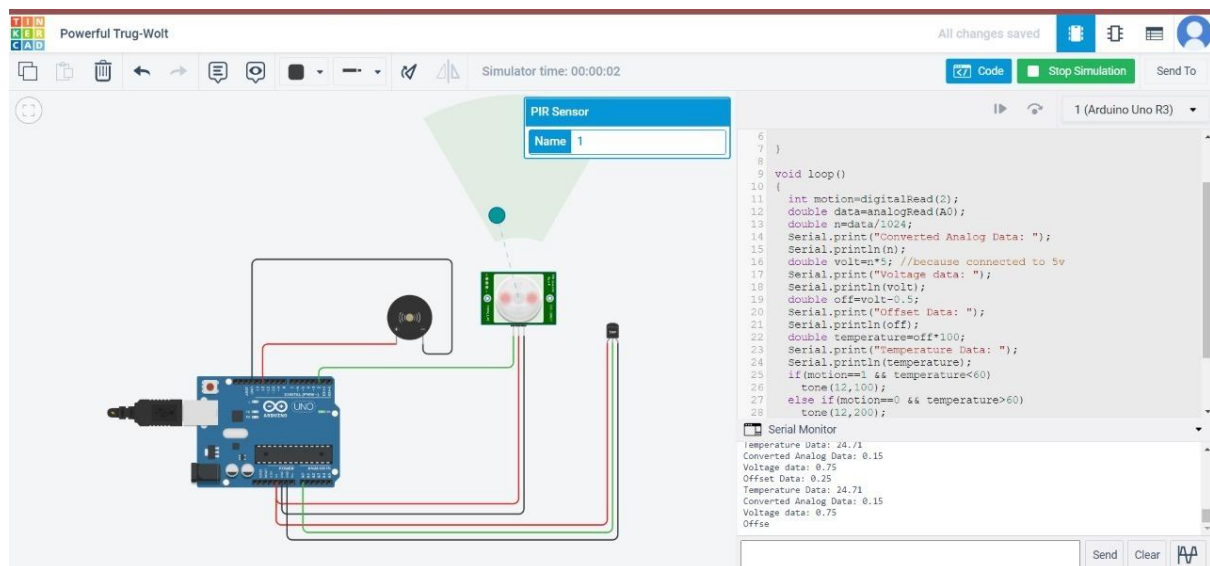
void loop()
{
  int motion=digitalRead(2);
  double data=analogRead(A0);
  double n=data/1024;
  Serial.print("Converted Analog Data: ");
  Serial.println(n);
  double volt=n*5; //because connected to 5v
  Serial.print("Voltage data: ");
  Serial.println(volt);
  double off=volt-0.5;
```

```

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:



Powerful Trug-Wolt

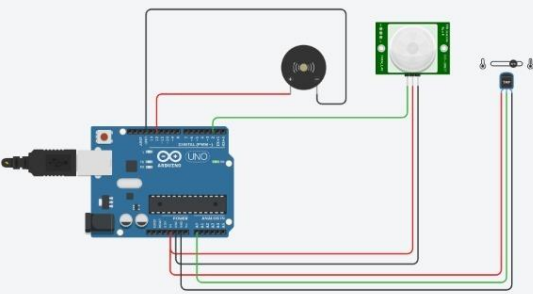
Simulator time: 00:00:03

All changes saved

Code Stop Simulation Send To

Temperature Sensor [TMP36]

Name 2



```
6
7
8
9 void loop()
10 {
11   int motion=digitalRead(2);
12   double data=analogRead(A0);
13   double n=data/1024;
14   Serial.print("Converted Analog Data: ");
15   Serial.println(n);
16   double volt=n*5; //because connected to 5v
17   Serial.print("Voltage data: ");
18   Serial.println(volt);
19   double off=volt-0.5;
20   Serial.print("Offset Data: ");
21   Serial.println(off);
22   double temperature=off*100;
23   Serial.print("Temperature Data: ");
24   Serial.println(temperature);
25   if(motion==1 && temperature<60)
26     tone(12,100);
27   else if(motion==0 && temperature>60)
28     tone(12,200);
29 }
```

Serial Monitor

Offset Data: 0.83
Temperature Data: 82.81
Converted Analog Data: 0.27
Voltage data: 1.33
Offset Data: 0.83
Temperature Data: 82.81
Converted Analog Data: 0.27
Voltage data:

Send Clear