IBM ASSIGNMENT- I

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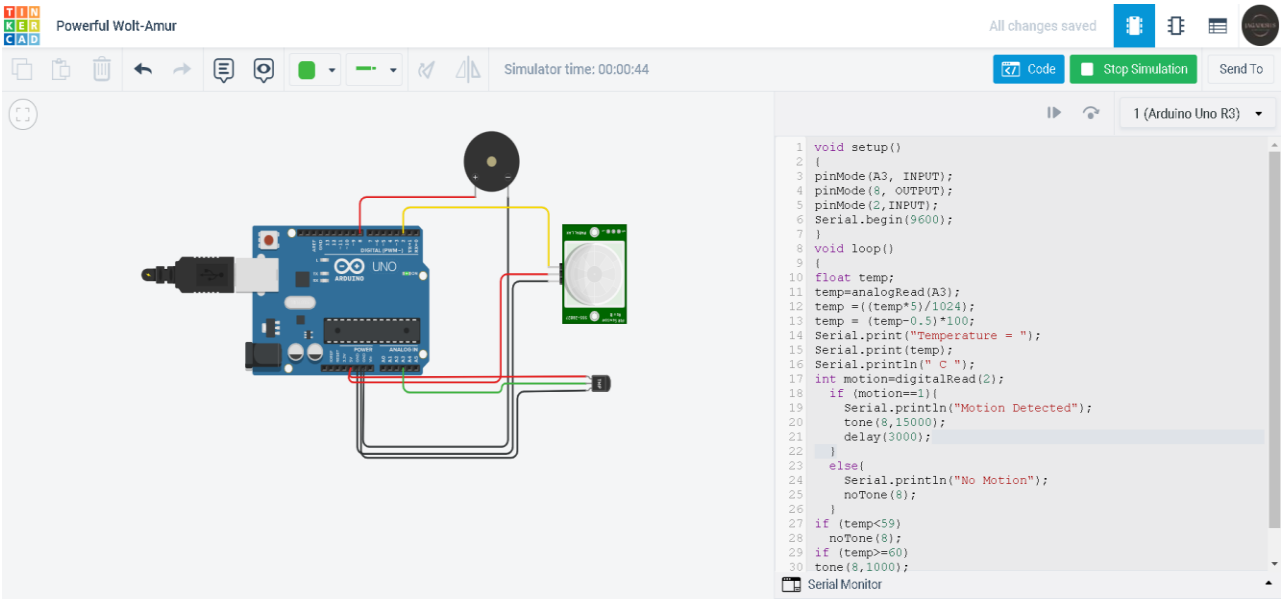
Create a circuit with Piezo alarm, PIR Sensor, TMP Sensor with below functionalities:

1.Alarm should sound in one manner if temp is above 60C

2.Alarm should sound with another frequency if motion is detected in PIR Sensor.

CIRCUIT LAYOUT:

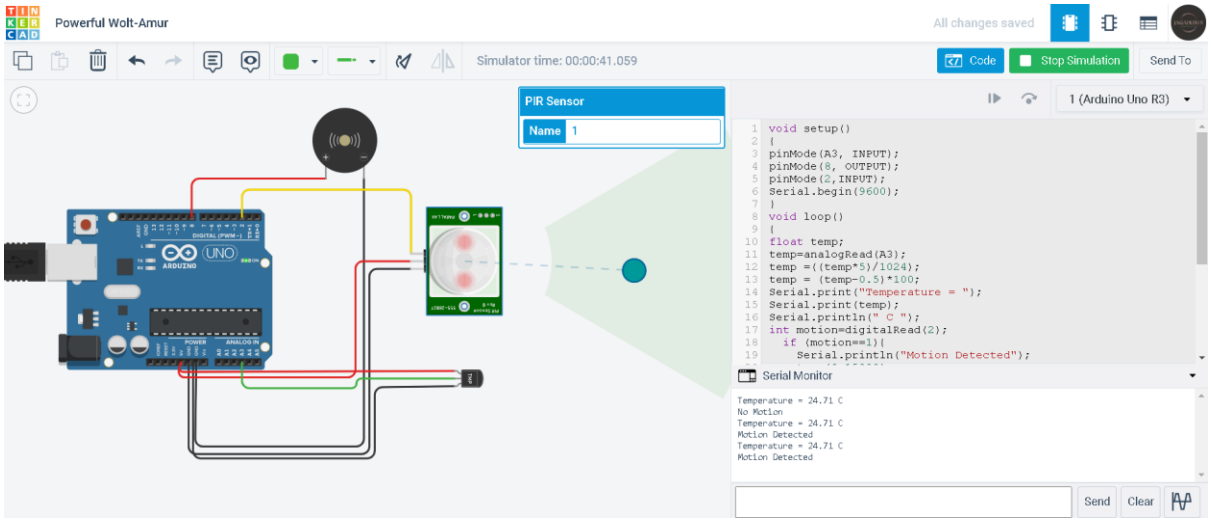


CODE:

```
void setup()
{
pinMode(A3, INPUT);
pinMode(8, OUTPUT);
pinMode(2,INPUT);
Serial.begin(9600);
}
void loop()
{
float temp;
temp=analogRead(A3);
temp =((temp*5)/1024);
temp = (temp-0.5)*100;
Serial.print("Temperature = ");
Serial.print(temp);
Serial.println(" C ");
int motion=digitalRead(2);
  if (motion==1){
    Serial.println("Motion Detected");
    tone(8,15000);
    delay(3000);
  }
  else{
    Serial.println("No Motion");
    noTone(8);
  }
if (temp<59)
  noTone(8);
if (temp>=60)
tone(8,1000);
delay(5000);
}
```

OUTPUT:

PASSIVE INFRARED SENSOR:



TEMPERTURE SENSOR (60 C):