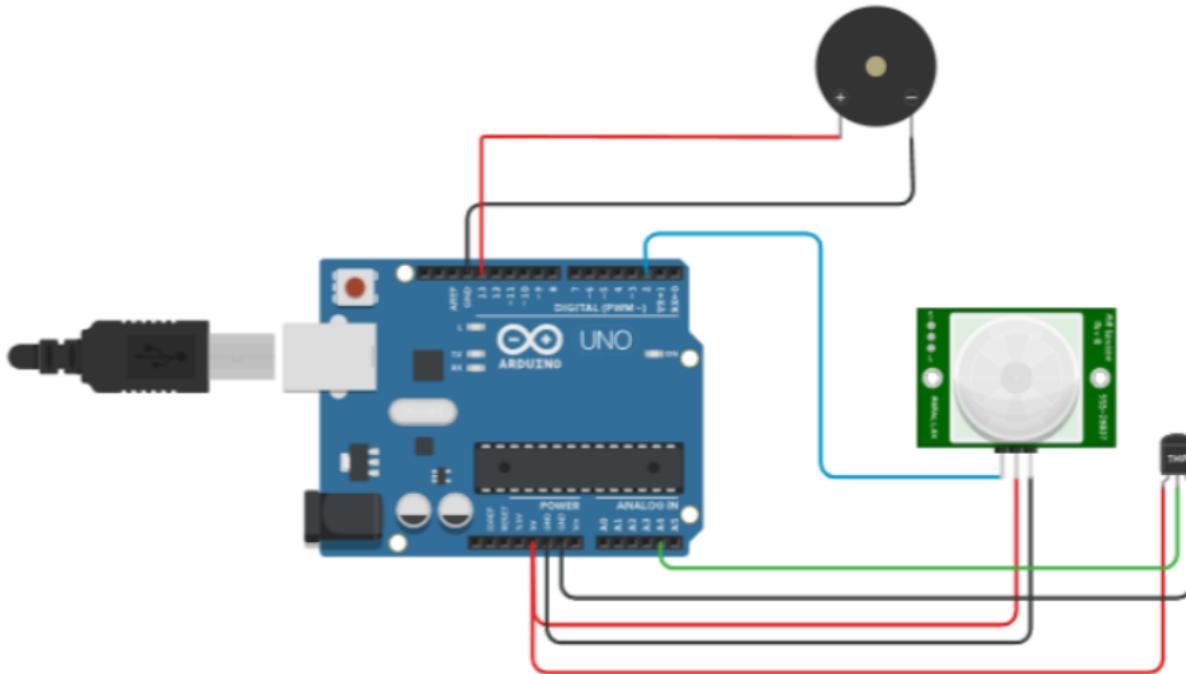


ASSIGNMENT 1

Home Automation Using Sensors

Circuit Diagram:



Code:

```
void setup() {  
    Serial.begin(9600);  
    pinMode(2,INPUT);  
    pinMode(13,OUTPUT);  
}  
void loop() {  
    int motion=digitalRead(2);  
    double temp=analogRead(A4);  
    double x=temp/1024;  
    double volt=x*5;  
    double off =volt-0.5;  
    double temperature=off*100;  
    double deg= 50;
```

```
if (motion==1) {
    digitalWrite(13,HIGH);
    delay(1000);
    digitalWrite(13,HIGH);
    delay(1000);
    Serial.println("Motion is being detected");
} else {
    digitalWrite(13,LOW);
    Serial.println("Motion is not detected");
}if (temperature> deg) {
    digitalWrite(13,HIGH);
    Serial.print("Temperature:");
    Serial.println(temperature);
} else {
    digitalWrite(13,LOW);
    Serial.print("Temperature:");
    Serial.println(temperature);
}
}
```