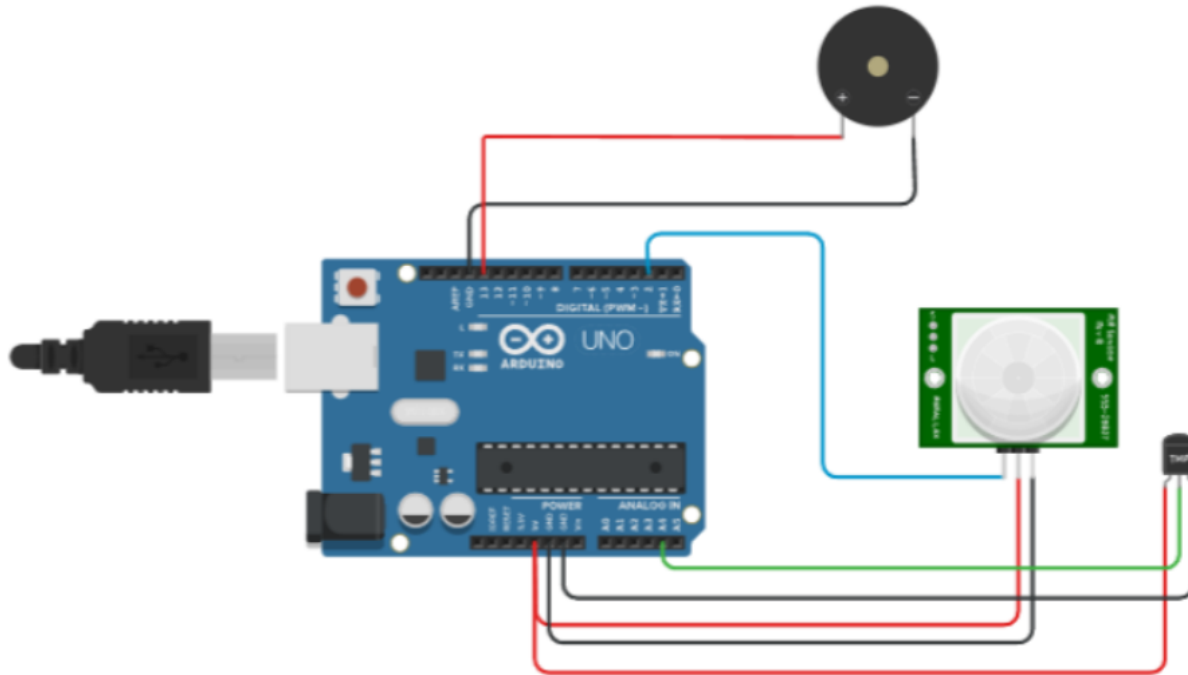


ASSIGNMENT 1

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);  
}  
}
```