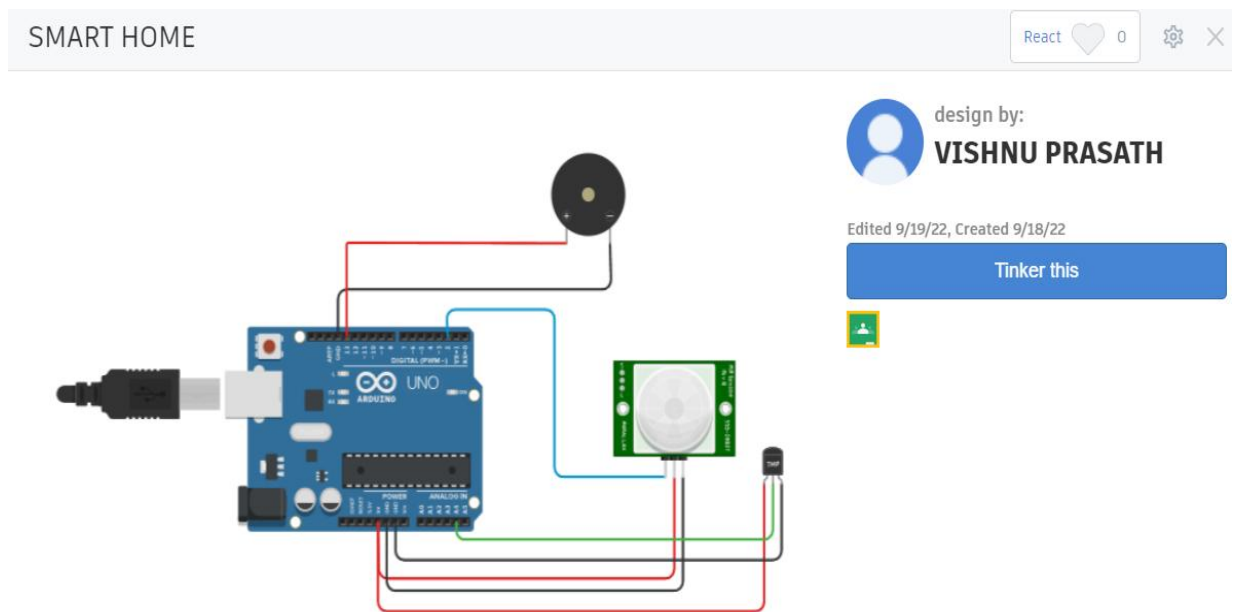


ASSIGNMENT 1

SMART HOME AUTOMATION USING SENSORS



CODE :

```
//C
```

```
void setup()
{
  Serial.begin(9600);
  pinMode(2,INPUT);
  pinMode(13,OUTPUT);
}
```

```

void loop()
{
  int motion=digitalRead(2);
  double tempdata=analogRead(A4);
  double a=tempdata/1024;
  double volts=a*5;
  double off =volts-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 isn't being detected");
  }

  if (temperature> deg)
  {
    digitalWrite(13,HIGH);
    Serial.print("Temperature:");
    Serial.println(temperature);
  }
  else
  {
    digitalWrite(13,LOW);
    Serial.print("Temperature:");
    Serial.println(temperature);}
}

```