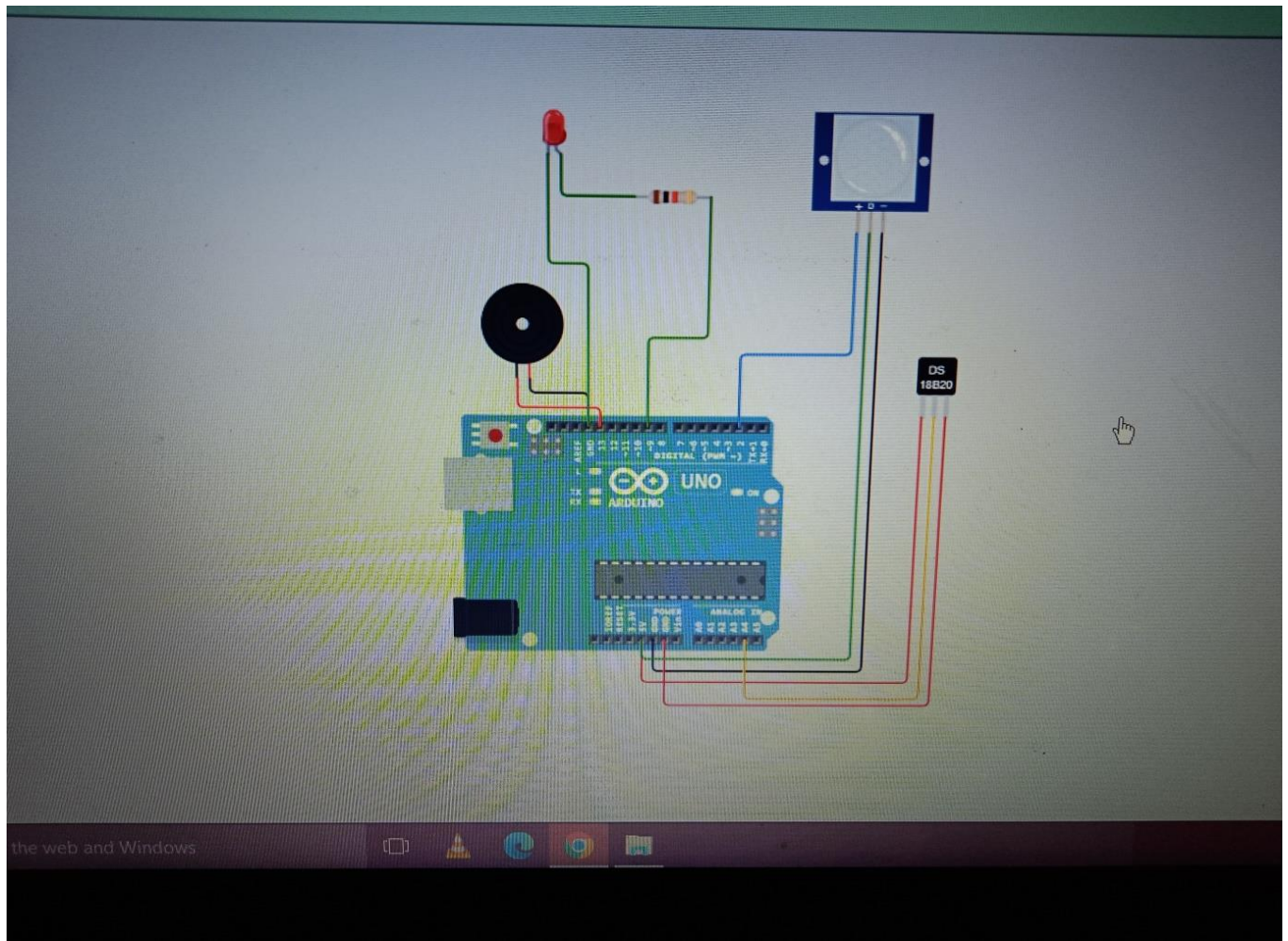


## ASSIGNMENT 1

### BUILDING A SMART HOME

**LINK:** <https://wokwi.com/projects/362725747827982337>

DIAGRAM:



CODE:

```
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);
```

```
}
```

```
}
```