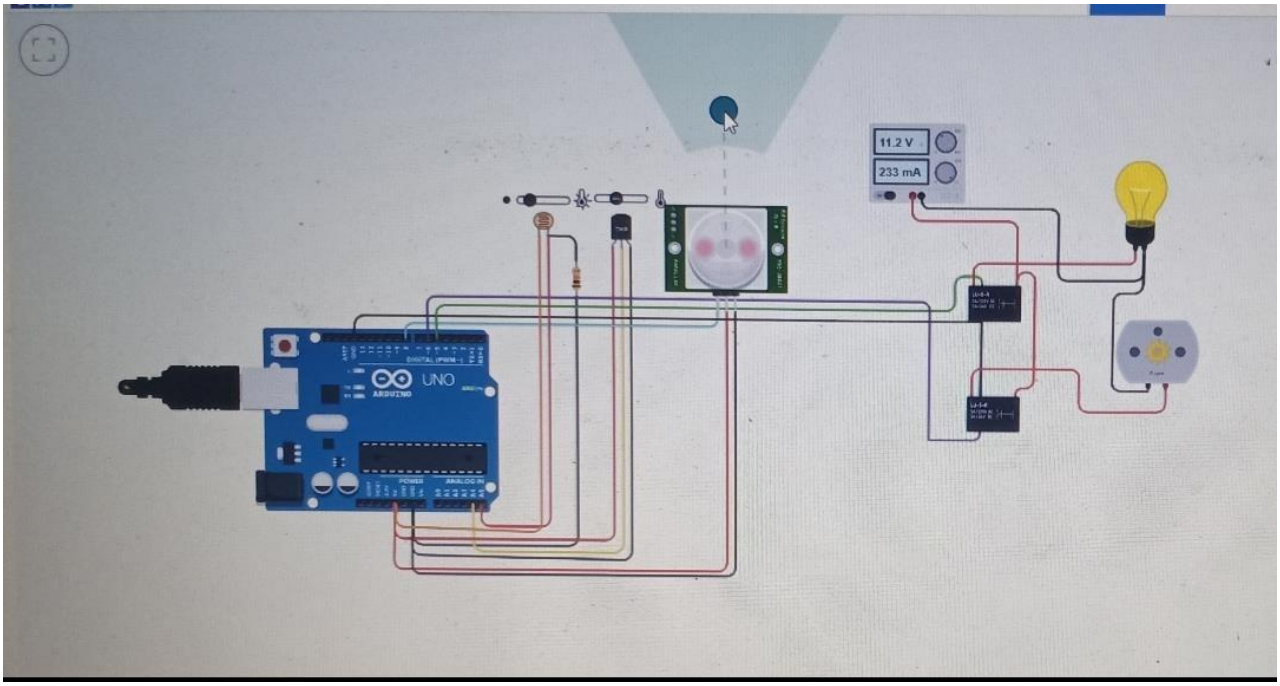
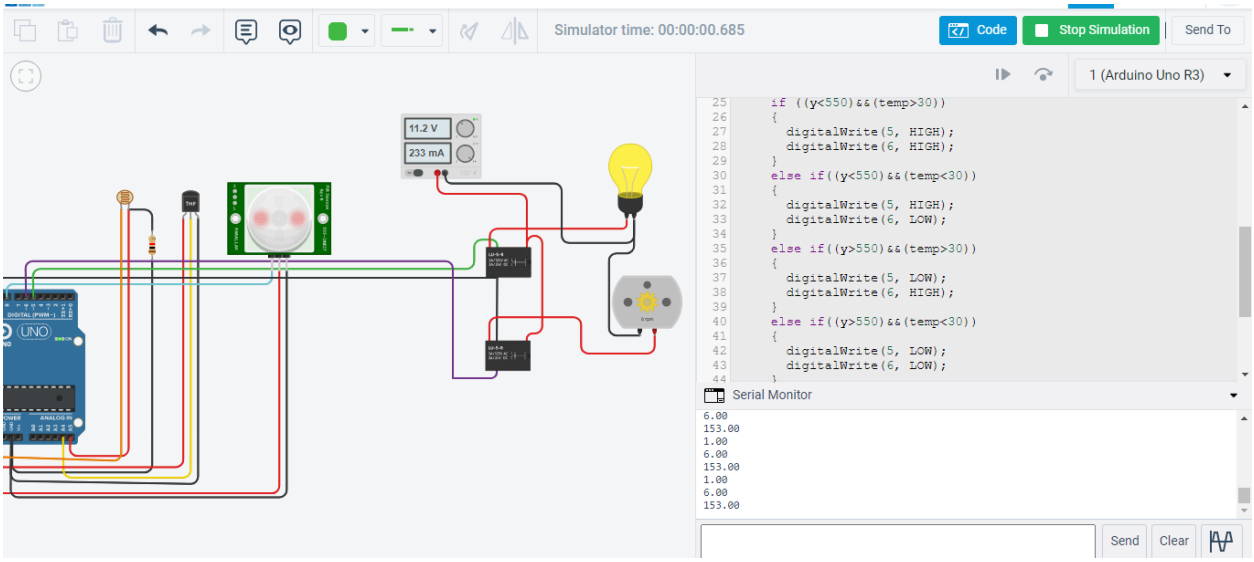
ASSIGNMENT : Make a smart home with all the sensors you Learned in tinkercad.

```
float x,y,z,temp;
void setup()
 {
   pinMode(8, INPUT);
   pinMode(5, OUTPUT);
   pinMode(6, OUTPUT);
   pinMode(A5, INPUT);
   pinMode(A4, INPUT);
 Serial.begin(9600);
 }
 void loop()
 {
   x= digitalRead(8);
   y= analogRead(A5);
   z= analogRead(A4);
   Serial.println(x);
   Serial.println(y);
   Serial.println(z);
   temp = (double)z / 1024;
   temp = temp * 5;
   temp = temp - 0.5;
   temp = temp * 100;
   if ( (x>0) )
   {
     if ((y<550)&&(temp>30))
     {
       digitalWrite(5, HIGH);
       digitalWrite(6, HIGH);
     }
     else if((y<550)&&(temp<30))
     {
       digitalWrite(5, HIGH);
       digitalWrite(6, LOW);
     }
     else if((y>550)&&(temp>30))
     {
       digitalWrite(5, LOW);
       digitalWrite(6, HIGH);
     }
     else if((y>550)&&(temp<30))
     {
       digitalWrite(5, LOW);
       digitalWrite(6, LOW);
     }
   }
   else
   {
     digitalWrite(5, LOW);
     digitalWrite(6, LOW);
   }
 }
```



TINKERCAD: https://www.tinkercad.com/things/26S3lLYi6g5


Simulator time: 00:00:00.685
Code
Stop Simulation
Send To
1 (Arduino Uno R3)
11.2 V
233 mA
if ((y<550)&&(temp>30))
{
digitalWrite(5, HIGH);
digitalWrite(6, HIGH);
}
else if((y<550)&&(temp<30))
{
digitalWrite(5, HIGH);
digitalWrite(6, LOW);
}
else if((y>550)&&(temp>30))
{
digitalWrite(5, LOW);
digitalWrite(6, HIGH);
}
else if((y>550)&&(temp<30))
{
digitalWrite(5, LOW);
digitalWrite(6, LOW);
}
Serial Monitor
6.00
153.00
1.00
6.00
153.00
1.00
6.00
153.00
Send
Clear