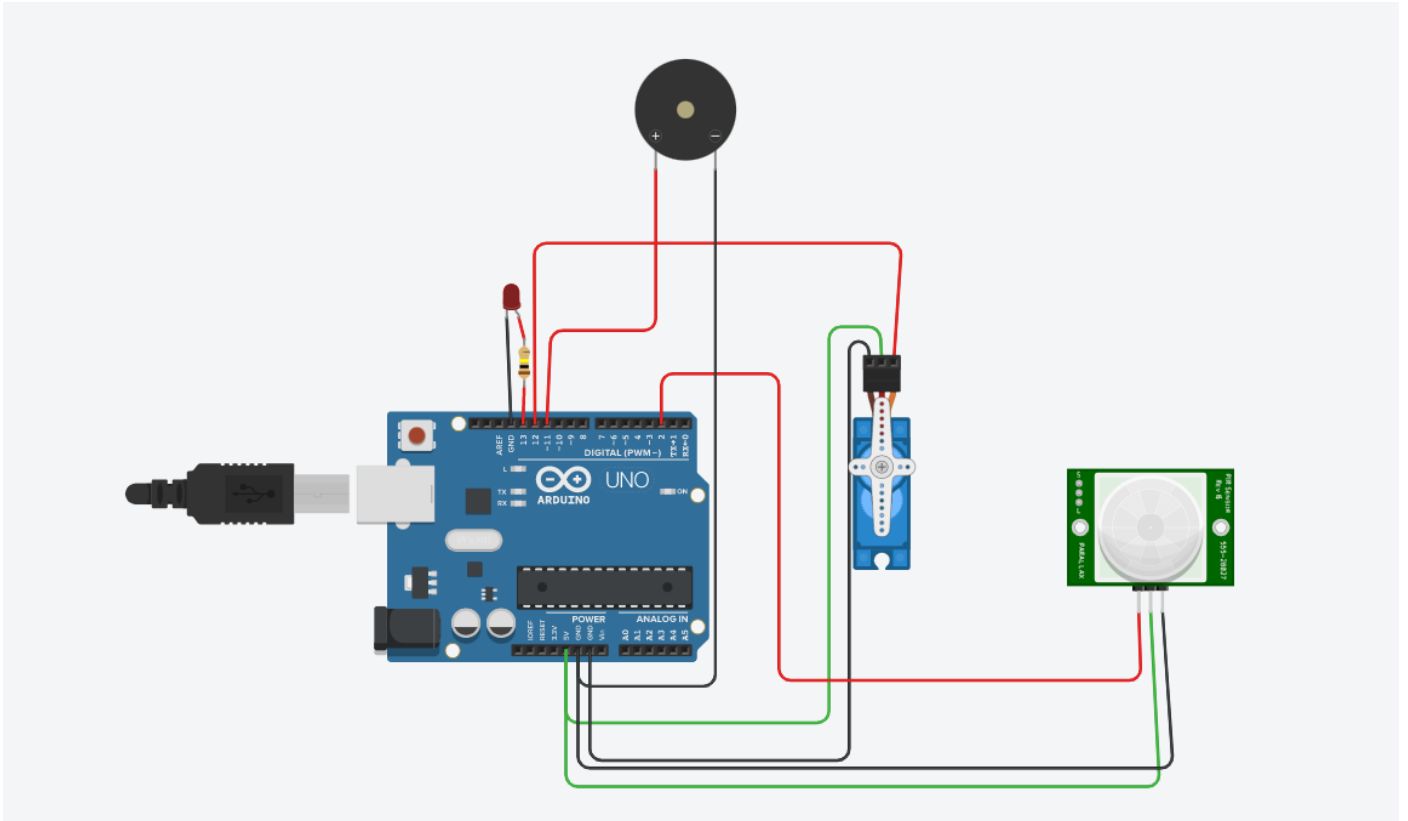# ASSESSMENT 1

Name : Manimaran R

Roll no: 711319EC060

AUTOMATIC DOOR

CIRCUIT:

```cpp
1  #include <Servo.h>
2  Servo s;
3  void setup()
4  {
5    pinMode(2, INPUT);
6    s.attach(12);
7    s.write(0);
8    pinMode(13,OUTPUT);
9    Serial.begin(9600);
10   pinMode(11,OUTPUT);
11 }
12
13 void loop()
14 {
15   int p = digitalRead(2);
16   if(p==1)
17    {
18     digitalWrite(13,HIGH);
19     Serial.println("Motion detected!!!");
20     tone(11,0);
21     s.write(90);
22     delay(5000);
23     s.write(0);
24
25
```

Serial Monitor

Text	▼	↧	🖶	A▲ ▼	1 (Arduino Uno R3)	▼

```cpp
10     pinMode(11,OUTPUT);
11 }
12
13 void loop()
14 {
15   int p = digitalRead(2);
16   if(p==1)
17    {
18     digitalWrite(13,HIGH);
19     Serial.println("Motion detected!!!");
20     tone(11,0);
21     s.write(90);
22     delay(5000);
23     s.write(0);
24
25
26    }
27   else{
28      digitalWrite(13,LOW);
29      Serial.println("No motion detected!!!");
30      noTone(11);
31      delay(1000);
32    }
33 }
34
```

Serial Monitor

CODE:

```
#include <Servo.h>
Servo s;
void setup()
{
 pinMode(2, INPUT);
 s.attach(12);
 s.write(0);
 pinMode(13,OUTPUT);
 Serial.begin(9600);
 pinMode(11,OUTPUT);
}

void loop()
{
 int p = digitalRead(2);
 if(p==1)
 {
  digitalWrite(13,HIGH);
  Serial.println("Motion detected!!!");
  tone(11,0);
  s.write(90);
  delay(5000);
  s.write(0);


 }
 else{
```

```
   digitalWrite(13,LOW);

   Serial.println("No motion detected!!!");

   noTone(11);

   delay(1000);

  }

}
```

OUTPUT: