

ASSIGNMENT-2

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CODE:

```
#include<Servo.h>

Servo s;

int t=4;

int e=5;

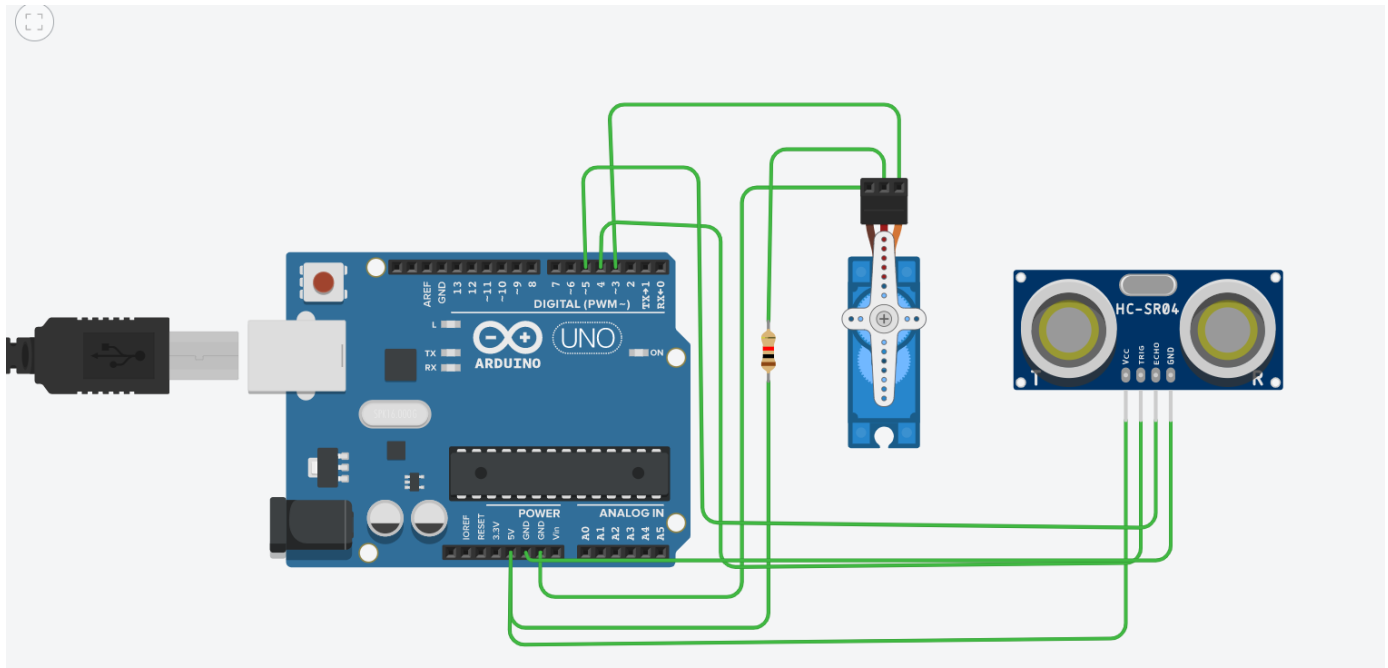
void setup()
{
    s.attach(3);
    pinMode(t, OUTPUT);
    pinMode(e, INPUT);
    Serial.begin(9600);
    s.write(0);
}

void loop()
{
    digitalWrite(t, LOW);
    digitalWrite(t, HIGH);
    delayMicroseconds(10);
    digitalWrite(t, LOW);
    float dur = pulseIn(e, HIGH);
```


```
float dis = (dur * 0.0343)/2;
Serial.print("distance in cm: ");
Serial.println(dis);
if (dis <= 250)
{
    Serial.println("door closed");
    Serial.print("Distance= ");
    Serial.println(dis);
    delay(100);
}
else{
    Serial.print("door open");
    Serial.print("Distance= ");
    Serial.println(dis);
    delay(100);


}
}
```

CIRCUIT:





OUTPUT:

 Code

 Stop Simulation

Export

Share




1 (Arduino Uno R3) ▾

```
1 #include<Servo.h>
2 Servo s;
3 int t=4;
4 int e=5;
5 void setup()
6 {
7     s.attach(3);
8     pinMode(t, OUTPUT);
9     pinMode(e, INPUT);
10    Serial.begin(9600);
11    s.write(0);
12 }
13
14 void loop()
15 {
16     digitalWrite(t, LOW);
17     digitalWrite(t, HIGH);
18     delayMicroseconds(10);
19     digitalWrite(t, LOW);
20     float dur = pulseIn(e, HIGH);
21     float dis = (dur * 0.0343)/2;
22     Serial.print("distance in cm: ");
23     Serial.println(dis);
24 }
```

How the debugger works

- 1. Add breakpoints by clicking on the line numbers.
- 2. Hover over the variables while paused to see their value.
- 3. Use the buttons above to resume simulation or step one line at a time.

 Serial Monitor

distance in cm: 113.07
door closed
Distance= 113.07
distance in cm: 111.53
door closed
Distance= 111.53
distance in cm: 113.07

