

#### CODE:

```
#include<Servo.h>

Servo s;

void setup()
{
  pinMode(2, OUTPUT);
  pinMode(3,INPUT);
  s.attach(5);
  Serial.begin(9600);
  s.write(0);
}

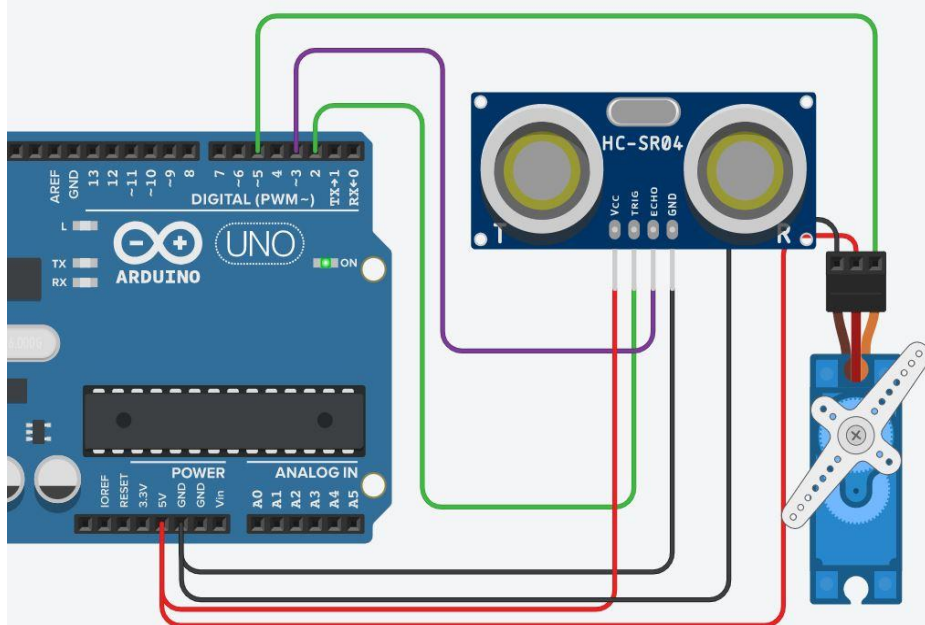
void loop()
{
  digitalWrite(2, LOW);
```

```
digitalWrite(2, HIGH);  
delayMicroseconds(10);  
digitalWrite(2, LOW);  
float dur=pulseIn(3, HIGH);  
float dis = (dur * 0.0343)/2;  
if(dis<=300)  
{  
    Serial.println("Door Opening");  
    for(int i=0;i<=180;i++)  
{  
        s.write(i);  
        delay(100);  
    }  
    delay(30000);  
    Serial.println("Door Closing");  
    for(int j=180;j>=0;j--)  
{  
        s.write(j);  
        delay(100);  
    }  
}  
}
```



Simulator time: 00:01:20

Code



```
1 #include<Servo.h>
2 Servo s;
3 void setup()
4 {
5   pinMode(2, OUTPUT);
6   pinMode(3, INPUT);
7   s.attach(5);
8   Serial.begin(9600);
9   s.write(0);
10 }
11
12 void loop()
13 {
14   digitalWrite(2, LOW);
15
16   digitalWrite(2, HIGH);
17   delayMicroseconds(10);
18   digitalWrite(2, LOW);
19   float dur=pulseIn(3,HIGH);
20   float dis = (dur * 0.0343)/2;
21   if(dis<=300)
22   {
23     Serial.println("Door Open");
24     for(int i=0;i<=180;i++)
25     {
```

Serial Monitor

Door Opening  
Door Closing  
Door Opening  
Door Closing