

## ASSIGNMENT -2

### ARDUINO CODE:

```
#include <Servo.h>
Servo motor;
int signal = 3;
int trigger = 4;
int echo = 5;
void setup()
{
  pinMode(signal, OUTPUT);
  pinMode(trigger, OUTPUT);
  pinMode(echo, INPUT);
  motor.attach(signal);

  Serial.begin(9600);
}
void loop()
{
  motor.write(0);

  digitalWrite(trigger, LOW);
  digitalWrite(trigger, HIGH);
  delayMicroseconds(20);
  digitalWrite(trigger, LOW);

  float dur = pulseIn(echo, HIGH);

  float dis = (dur * 0.035)/2;

  Serial.print("Distance measured: ");
  Serial.println(dis);

  if(dis < 250){

    motor.write(90);
    Serial.println("Door opened.");

    delay(15 * 1000);

    motor.write(0);
```

```

delay(2 * 1000);
Serial.println("Door closed.");
}
}

```

OUTPUT:

Name 1

```

1 #include <Servo.h>
2 Servo motor;
3 int signal = 3;
4 int trigger = 4;
5 int echo = 5;
6 void setup()
7 {
8   pinMode(signal, OUTPUT);
9   pinMode(trigger, OUTPUT);
10  pinMode(echo, INPUT);
11  motor.attach(signal);
12
13  Serial.begin(9600);
14 }
15 void loop()

```

Serial Monitor

Distance measured:	224.60
Distance measured:	226.36
Distance measured:	224.75
Distance measured:	224.77
Distance measured:	226.36
Distance measured:	224.75
Distance measured:	226.36
Distance measured:	224.58
Distance measured:	224.75
Distance measured:	226.36
Distance measured:	224.77
Distance measured:	226.33
Distance measured:	224.60
Distance measured:	224.77
Distance measured:	226.15
Distance measured:	224.77
Distance measured:	226.36
Distance measured:	224.Distance
Door opened.	
Door closed.	
Distance measured:	225.02
Door opened.	