

Servo Motor Controlled By Ultrasonic Sensor

Program:

```
#include <Servo.h>
```

```
#define trigPin 7
```

```
#define echoPin 6
```

```
Servo servo;
```

```
int sound = 250;
```

```
void setup() {
```

```
  Serial.begin (9600);
```

```
  pinMode(trigPin, OUTPUT);
```

```
  pinMode(echoPin, INPUT);
```

```
  servo.attach(8);
```

```
}
```

```
void loop() {
```

```
  long duration, distance;
```

```
digitalWrite(trigPin, LOW);
```

```
delayMicroseconds(2);
```

```
digitalWrite(trigPin, HIGH);
```

```
delayMicroseconds(10);
```

```
digitalWrite(trigPin, LOW);
```

```
duration = pulseIn(echoPin, HIGH);
```

```
distance = (duration/2) / 29.1;
```

```
if (distance < 5) {
```

```
Serial.println("the distance is less than 5");
```

```
servo.write(90);
```

```
}
```

```
else {
```

```
servo.write(0);
```

```
}
```

```
if (distance > 60 || distance <= 0){  
  
  Serial.println("The distance is more than 60");  
  
}  
  
else {  
  
  Serial.print(distance);  
  
  Serial.println(" cm");  
  
}  
  
delay(500);  
  
}
```