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#include <Servo.h>
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int pos = 0;
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Servo servo1;  
int trigPin = 2;  
int echoPin = 3;  
int trigPin2 = 6;  
int echoPin2 = 5;
```

```
void setup() {  
  Serial.begin (9600);  
  pinMode(trigPin, OUTPUT);  
  pinMode(echoPin, INPUT);  
  pinMode(trigPin2, OUTPUT);  
  pinMode(echoPin2, INPUT);  
  pinMode(9, OUTPUT);  
  servo1.attach(9);  
}  
  
void loop(){  
  ultra();  
  int duration, distance;  
  digitalWrite (trigPin, HIGH);  
  delayMicroseconds (1);  
  digitalWrite (trigPin, LOW);  
  duration = pulseIn(echoPin, HIGH);  
  distance = (duration/2)/29.1;
```

```
  Serial.print(distance);  
  Serial.print("cm");  
  Serial.println();
```

```
  if(distance > 100) {
```

```

digitalWrite (9, HIGH);
}
else {
digitalWrite (9, LOW);
}

int duration2, distance2;
digitalWrite (trigPin2, HIGH);
  delayMicroseconds (1);
digitalWrite (trigPin2, LOW);
duration = pulseIn(echoPin2, HIGH);
distance2 = (duration/2)/29.1;

Serial.print(distance2);
Serial.print("cm");
Serial.println();

if(distance > 100) {
digitalWrite (9, HIGH);
}
else {
digitalWrite (9, LOW);
}
}
void ultra(){

for (pos = 0; pos <= 90; pos += 1) {

  servo1.write(pos);

  delay(15);
}

delay (1000);

for (pos = 90; pos >= 0; pos -= 1) {

  servo1.write(pos);

  delay(15);
}
delay (800);
}

```