

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

```
Servo myservo1;
```

```
Servo myservo2;
```

```
int pattern = 0;
```

```
unsigned long cnt = 0;
```

```
int timekeep = 50;
```

```
void setup() {
```

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

```
  pinMode(12, INPUT);
```

```
  myservo1.attach(6);
```

```
  myservo2.attach(5);
```

```
}
```

```
int angle() {
```

```
  int angle;
```

```
  angle = analogRead(A0);
```

```
  angle = map(angle, 0, 1023, 0, 180);
```

```
  angle = constrain(angle, 0, 180);
```

```
  return angle;
```

```
}
```

```
void servo1set() {
```

```
  int servoangle;
```

```
  servoangle = angle();
```

```
  myservo1.write(servoangle);
```

```
  Serial.print(servoangle);
```

```
  Serial.print(" ");
```

```
}
```

```
void servo2set() {
```

```
  int servoangle;
```

```
  servoangle = angle();
```

```
  myservo2.write(servoangle);
```

```
  Serial.print(servoangle);
```

```
  Serial.print(" ");
```

```
}
```

```
void servoset() {
```

```
switch (pattern) {
  case 0:
    if (digitalRead(12) == HIGH && cnt >= timekeep) {
      cnt = 0;
      pattern = 1;
    }
    break;

  case 1:
    servo1set();
    if (digitalRead(12) == HIGH && cnt >= timekeep) {
      cnt = 0;
      pattern = 2;
    }
    break;

  case 2:
    servo2set();
    if (digitalRead(12) == HIGH && cnt >= timekeep) {
      cnt = 0;
      pattern = 0;
    }
    break;
}
cnt++;
Serial.print(cnt);
Serial.print(" ");
Serial.println(pattern);
}

void loop() {
  servoset();
}
```