

```
/* Sweep  
by BARRAGAN <http://barraganstudio.com>  
This example code is in the public domain.  
  
modified 8 Nov 2013  
by Scott Fitzgerald  
https://www.arduino.cc/en/Tutorial/LibraryExamples/Sweep  
*/
```

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

```
Servo myservo; // create servo object to control a servo  
// twelve servo objects can be created on most boards
```

```
int pos = 0; // variable to store the servo position
```

```
void setup() {  
  //start serial connection  
  Serial.begin(9600);  
  //configure pin 2 as an input and enable the internal pull-up resistor  
  pinMode(2, INPUT_PULLUP);  
  pinMode(9, OUTPUT);  
  myservo.attach(9); // attaches the servo on pin 9 to the servo object  
}
```

```
void loop() {  
  //read the pushbutton value into a variable  
  int sensorVal = digitalRead(2);  
  //print out the value of the pushbutton  
  Serial.println(sensorVal);  
  // Keep in mind the pull-up means the pushbutton's logic is inverted. It goes  
  // HIGH when it's open, and LOW when it's pressed. Turn on pin 9 when the  
  // button's pressed, and off when it's not:  
  if (sensorVal == HIGH) {  
    //digitalWrite(9, LOW);  
  } else {  
    for (pos = 0; pos <= 180; pos += 180) { // goes from 0 degrees to 180 degrees  
      // in steps of 1 degree  
      myservo.write(pos); // tell servo to go to position in variable 'pos'  
      delay(150);  
    }  
    for (pos = 180; pos >= 0; pos -= 180) { // goes from 180 degrees to 0 degrees  
      myservo.write(pos); // tell servo to go to position in variable 'pos'  
      delay(150); // waits 15 ms for the servo to reach the position  
    }  
  }  
}
```