



```
//1
#include <Servo.h>
#define bp1 3
#define bp2 4
int potpos1 //A0
int potpos2 //A1
int potvit //A2
int pos1 = 90;
int pos2 = 90;
int pos = 90;
int vit = 0;
Servo servo1;
void setup() {
  pinMode (3, INPUT_PULLUP);
  pinMode (4, INPUT_PULLUP);
  delay(100);
  servo1.attach(9);
  servo1.write(pos);
  delay (500);
  servo1.detach();
}
```

```
//2
void loop() {
  lirepot();
  if (digitalRead (bp1) == LOW)
  {
    if (pos > pos1)
    {
      servo1.attach(9);
      if ( vit <10 )
      {servo1.write(pos1);
      delay (200);
      pos=pos1;
      servo1.detach();
    }
    else
      for (pos; pos > pos1; pos = pos - 2)
      {
        servo1.write(pos);
        delay (vit);
      }
      servo1.detach();
    }
    if (pos < pos1)
    {
      servo1.attach(9);
      if ( vit <10 )
      {servo1.write(pos1);
      delay (200);
      pos=pos1;
      servo1.detach();
    }
    else
      for (pos; pos < pos1; pos = pos + 2)
      { servo1.write(pos);
        delay (vit);
      }
      servo1.detach();
    }
  }
```

```
//3
  if (digitalRead (bp2) == LOW)
  {
    if (pos > pos2)
    {
      servo1.attach(9);
      if ( vit <10 )
      {servo1.write(pos2);
      delay (200);
      pos=pos2;
      servo1.detach();
    }
    else
      for (pos; pos > pos2; pos = pos - 1)
      {
        servo1.write(pos);
        delay (vit);
      }
      servo1.detach();
    }

    if (pos < pos2)
    { servo1.attach(9);
    if ( vit <10 )
    {servo1.write(pos2);
    delay (200);
    pos=pos2;
    servo1.detach();
    }
  }
```

```
//4
else
  for (pos; pos < pos2; pos = pos + 1)
  {
    servo1.write(pos);
    delay (vit);
  }

  servo1.detach();
}
}
void lirepot()
{
potpos1 = analogRead(A0);
pos1 = map(potpos1, 0, 1023, 1, 180);
potpos2 = analogRead(A1);
pos2 = map(potpos2, 0, 1023, 1, 180);
potvit = analogRead(A2);
vit = map(potvit, 0, 1023, 0, 150);
//vit = 150 - vit;
delay (100);
}
```