

NAME: ALI HASSAN HASHIM ALAYAFY

TASK #1- SERVO MOTOR

A servomotor is a linear actuator or rotary actuator that allows for precise control of linear or angular position, acceleration, and velocity

I make a circuit using **tinkercad**, servo motor circuit using both of Arduino uno and servo motor

For the power I use 5v and grd pins, and for the data pin I use pin 13

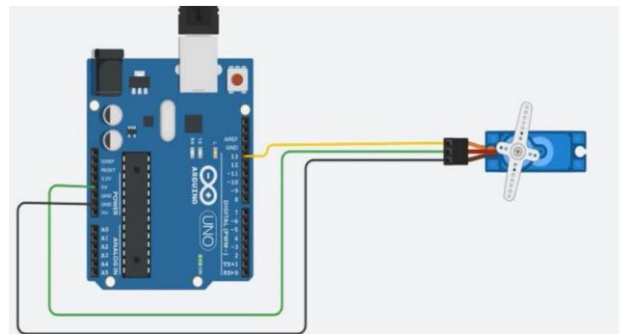


Figure 1 SERVO CIRCUIT DIAGRAM

CODE

```
1  #include<Servo.h>
2  Servo servol;
3  int pos = 0;
4  void setup()
5  {
6      servol.attach(13); // because i have connected signal pin with 13
7  }
8
9  void loop()
10 {
11     // rotate from 0 to 180 degree
12     for(pos=0;pos<=180;pos++)
13     {
14         servol.write(pos);
15         delay(100);
16     }
17
18     delay(1000);
19
20     for(pos=180;pos>=0;pos--)
21     {
22         servol.write(pos);
23         delay(100);
24     }
25     delay(1000);
26 }
27 }
```

Figure 2 CODE