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Task   : 1 (Servo motor)

In this task, I made a circuit on **tinkercad**: a servo motor circuit consisting of an arduino uno and a servo motor .

Connecting wires :

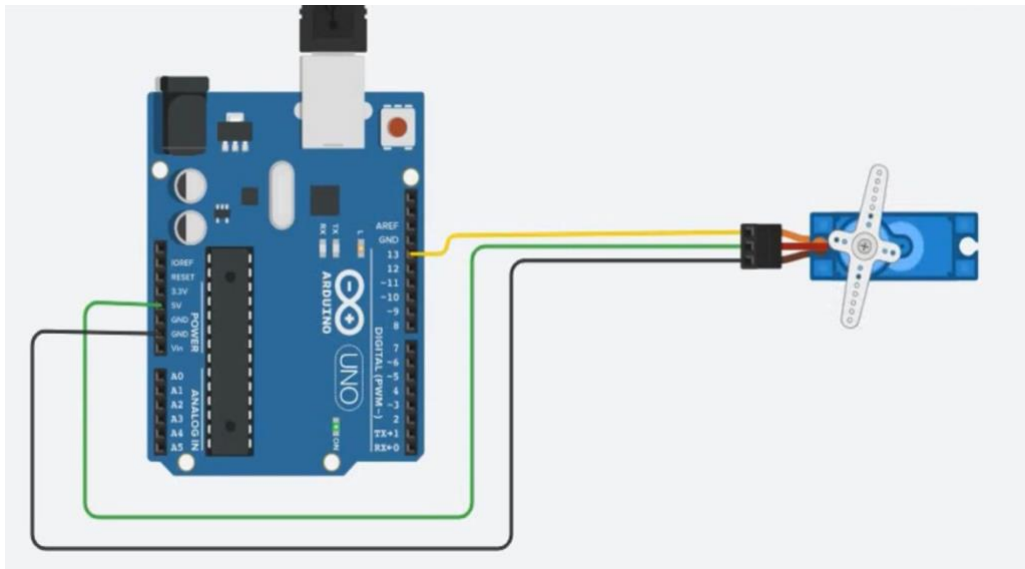I have been connect the signal to pin 13 on the arduino, the power to 5V, and the ground to GND .

Figure : 1 (The circuit)

```
1   #include<Servo.h>
2   Servo servo1;
3   int pos = 0;
4   void setup()
5   {
6       servo1.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          servo1.write(pos);
15          delay(100);
16      }
17
18      delay(1000);
19
20      for(pos=180;pos>=0;pos--)
21      {
22          servo1.write(pos);
23          delay(100);
24      }
25      delay(1000);
26
27  }
28  //now notice the speed of rotation
29
```

Figure : 2 (The code used)