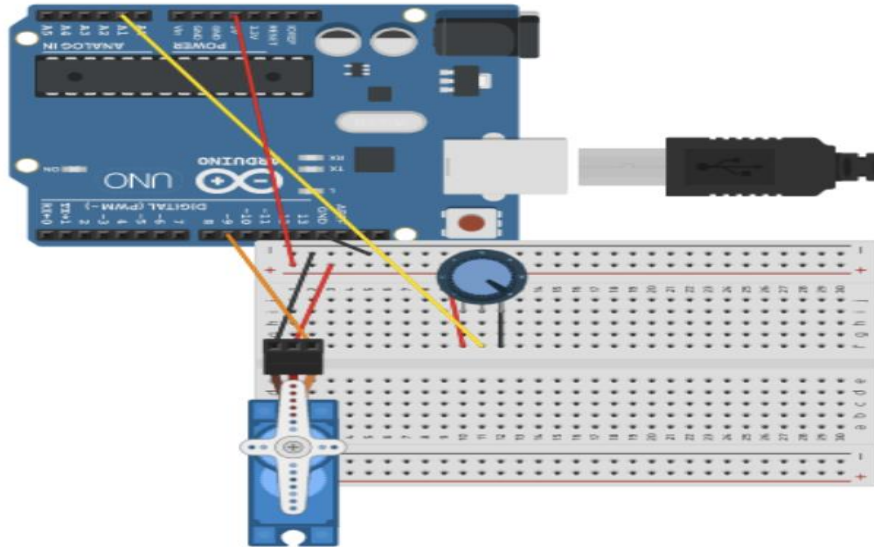


### 1- Servo Motor:

I used the potentiometer to control the angle of the servo.

#### The Servo Motor circuit:



#### Arduino Code:

```
#include <Servo.h>

Servo myservo;

int val;

void setup()
{
  myservo.attach(9);
}

void loop()
{
  val = analogRead(1);
  val = map(val, 0, 1023, 0, 180);
  myservo.write(val);
  delay(15);
}
```

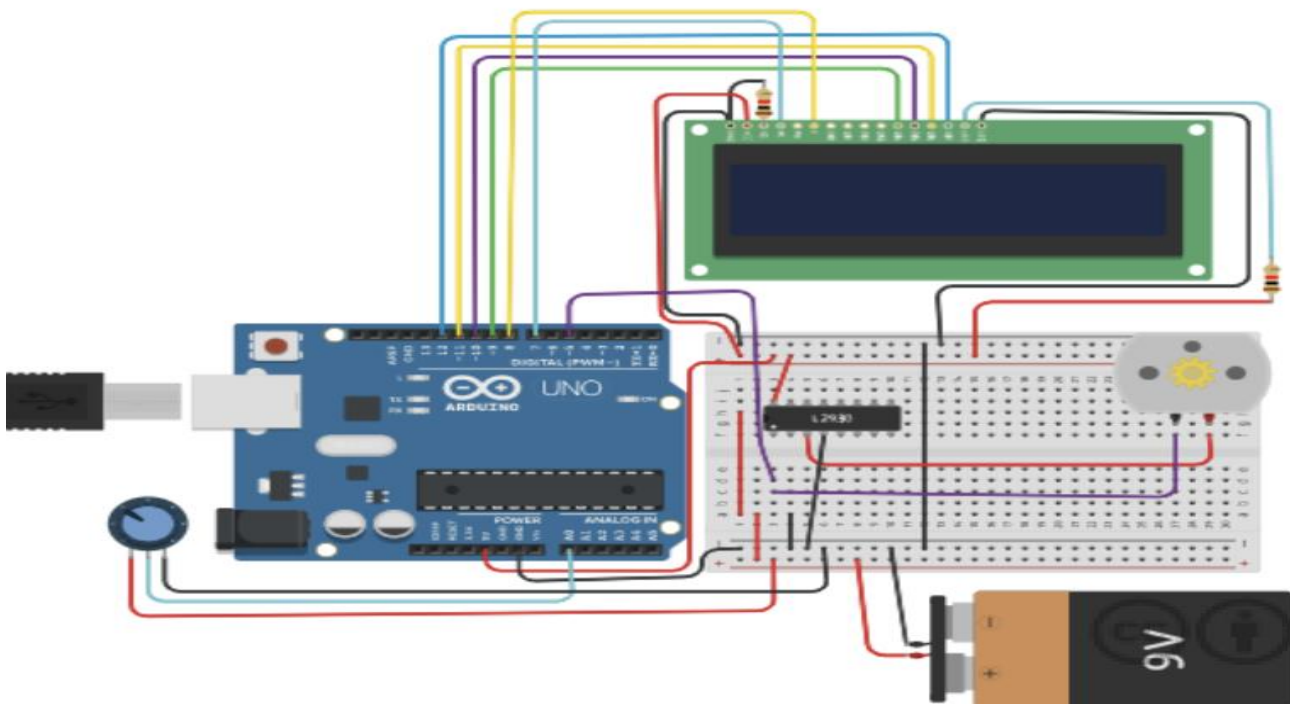
**This is the tinkercard simulation for the Servo Motor:**

<https://www.tinkercad.com/things/jaHfunVHOsX>

## **2- Brushless motor:**

I used the lcd in order to see the results on it. And I connected the motor to the Arduino through the H-bridge motor driver(L293D)

**The Brushless Motor circuit:**



### Arduino Code:

```
#include <LiquidCrystal.h>

LiquidCrystal mylcd(7,8,9,10,11,12);

volatile int a;

volatile int b;void setup(){

  mylcd.begin(16,2);

  mylcd.setCursor(1-1, 1-1);

  mylcd.print("hello");

  delay(1000);

  mylcd.clear();

  a = 0;

  b = 0;

}

void loop(){

  a = analogRead(A0) / 4;

  b = a * 70;

  analogWrite(5,a);

  mylcd.setCursor(1-1, 2-1);

  mylcd.print("RPM=");

  mylcd.setCursor(5-1, 2-1);

  mylcd.print(b);

}
```

### This is the tinkercard simulation for the brushless Motor:

[https://www.tinkercad.com/things/4WwGFxpkTM4?sharecode=0jvoAisoqGZNQit4kGRcrjDedViH8SUcaBF\\_thIT8K4](https://www.tinkercad.com/things/4WwGFxpkTM4?sharecode=0jvoAisoqGZNQit4kGRcrjDedViH8SUcaBF_thIT8K4)