IBM ASSIGNMENT- 1

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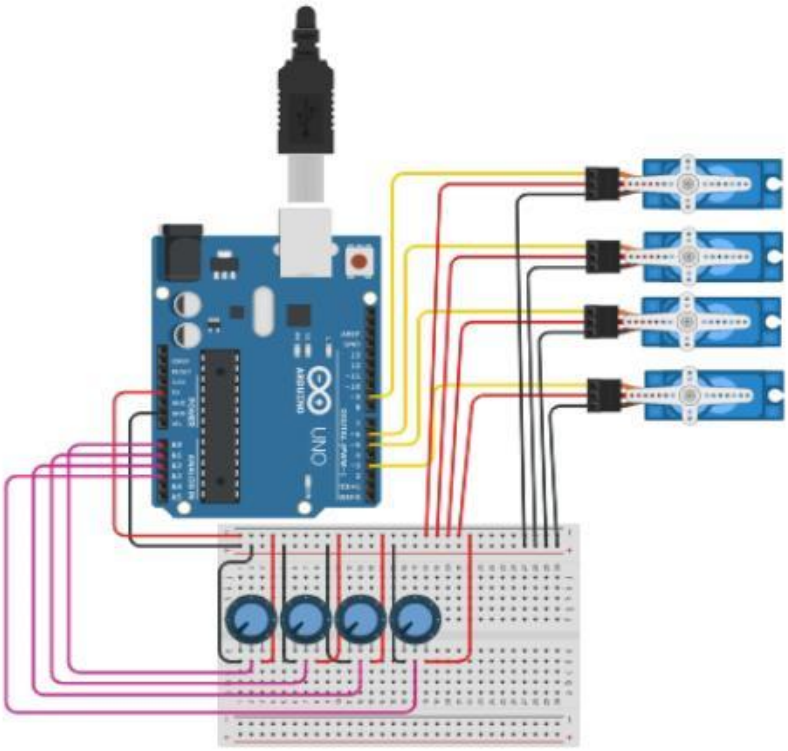
My project is an robotic arm which performs the task like pick and place . servo motor used in this circuit and potentiometer is used to control the servos

Circuit Layout:



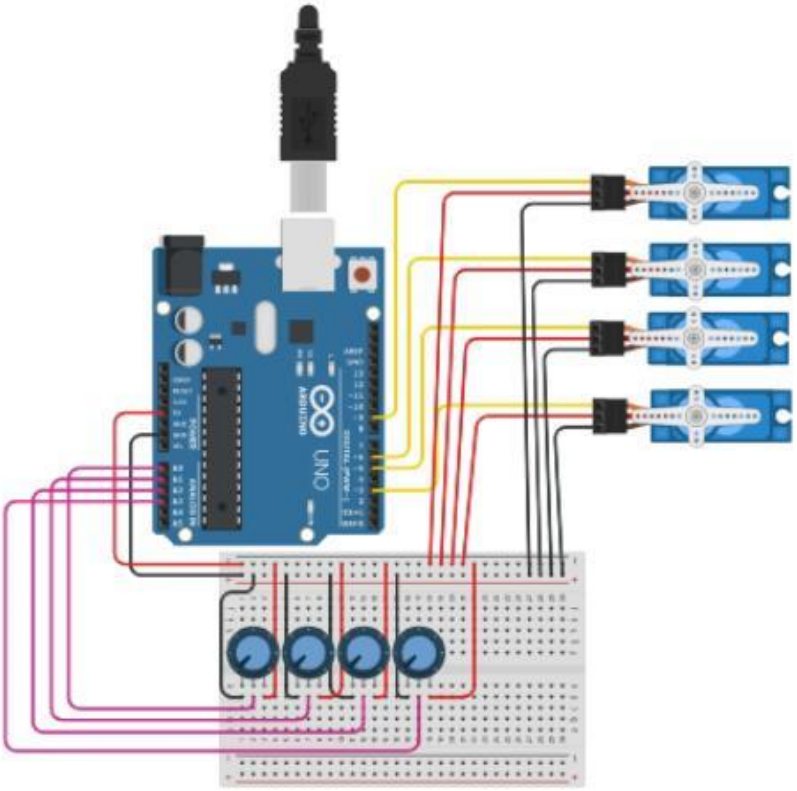
Code:

```
#include <Servo.h>

Servo myservo1;  // create servo object to control a servo
```

```
Servo myservo2;
Servo myservo3;
Servo myservo4;
Int potpin1 = 0;  // analog pin used to connect the potentiometer
Int potpin2 = 1;
Int potpin3 = 2;
Int potpin4 = 3;
Int val1;    // variable to read the value from the analog pin
Int val2;
Int val3;
Int val4;
Void setup() {
  Myservo1.attach(9);
  Myservo2.attach(6);
  Myservo3.attach(5);
  Myservo4.attach(3);// attaches the servo on pin 9 to the servo object
}

Void loop() {
  Val1 = analogRead(potpin1);            // reads the value of the potentiometer (value between
0 and 1023)
  Val1 = map(val1, 0, 1023, 0, 180);     // scale it to use it with the servo (value between 0 and
180)
  Myservo1.write(val1);                  // sets the servo position according to the scaled value
  Val2 = analogRead(potpin2);            // reads the value of the potentiometer (value between
0 and 1023)
  Val2 = map(val2, 0, 1023, 0, 180);     // scale it to use it with the servo (value between 0 and
180)
  Myservo2.write(val2);
  Val3 = analogRead(potpin3);            // reads the value of the potentiometer (value between
0 and 1023)
```

```
  Val3 = map(val3, 0, 1023, 0, 180);     // scale it to use it with the servo (value between 0 and
180)
  Myservo3.write(val3);
  Val4 = analogRead(potpin4);            // reads the value of the potentiometer (value between
0 and 1023)
  Val4 = map(val4, 0, 1023, 0, 180);     // scale it to use it with the servo (value between 0 and
180)
  Myservo4.write(val4);




  Delay(15);                             // waits for the servo to get there
}
```

Output: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