

Program no : 14

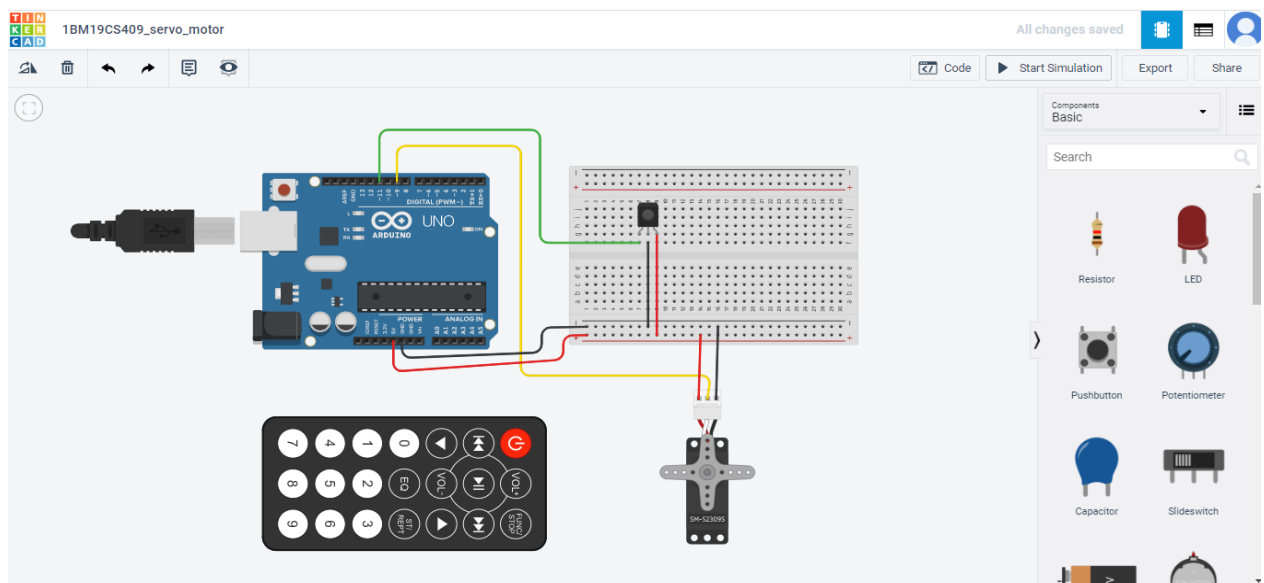
Program Title : Servo motor controller

Aim : To rotate the servo motor in clockwise and counter clockwise.

Hardware Required

- Arduino Board
- Wires
- Breadboard
- Resistor
- IR sensor
- IR remote
- Micro servo

Circuit Diagram :



Code:

Sumalata
IBM19CS409

A/day

Program - 14
Servo motor controller

```
#include <Servo.h>
#include <IRremote.h>
int RECV_PIN = 11;
IRrecv irrecv(RECV_PIN);
decode_results results;
Servo myServo;
void setup()
{
  Serial.begin(9600);
  irrecv.enableIRIn();
}

void loop()
{
  if (irrecv.decode(&results))
  {
    switch (results.value)
    {
      case 0x1000FF00:
        myServo.attach(9);
```

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```

Serial.println("Start");
break;
case 0XFD609F:
    myservo.write(360);
    Serial.println("clockwise");
    break;
case 0XFD20DF:
    myservo.write(-360);
    Serial.println("Counter clockwise");
    break;
default:
    Serial.print("unrecognized code
                received: 0x");
    Serial.println(result.value, HEX);
    break;
}
irrec.resume();
}
}

```

```
#include <Servo.h>
```

```
#include <IRremote.h>
```

```
int RECV_PIN = 11;
```

```
IRrecv irrecv(RECV_PIN);
```

```
decode_results results;
```

```
Servo myservo;
```

```
void setup(){
```

```
    Serial.begin(9600);
```

```
    irrecv.enableIRIn();
```

```
}
```

```
void loop(){
```

```
    if (irrecv.decode(&results))
```

```
    {
```

```
        switch (results.value)
```

```
        {
```

```
            case 0xFD00FF:
```

```
                myservo.attach(9);
```

```
                Serial.println("Start");
```

```
                break;
```

```
            case 0xFD609F:
```

```
                myservo.write(360);
```

```
                Serial.println("Clockwise");
```

```
                break;
```

```
            case 0xFD20DF:
```

```
                myservo.write(-360);
```

```
                Serial.println("Counter Clockwise");
```

```
                break;
```

```
            default:
```

```
                Serial.print("Unrecognized code received: 0x");
```

```
                Serial.println(results.value, HEX);
```

```
                break;
```

```
        }
```

```

    irrecv.resume();
}
}

```

Observation /Output :

