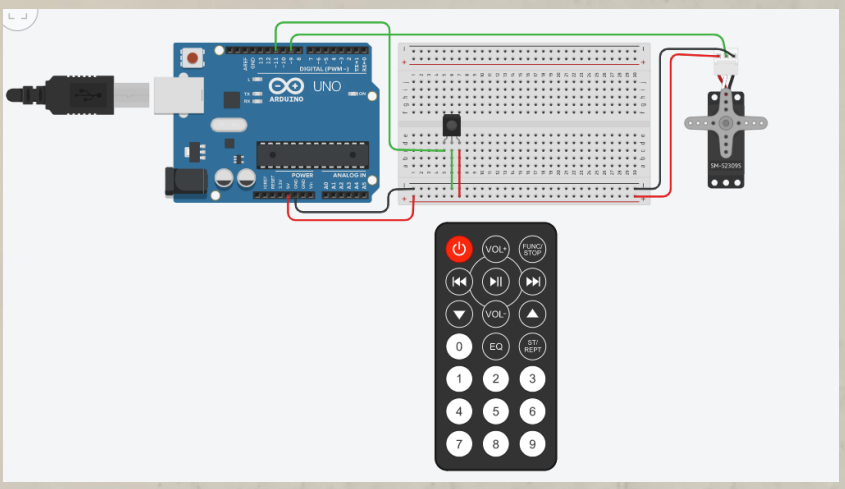
03-11-2020

PROGRAM-14

Title: IR Based Servo Motor Controller:

Aim: To rotate the servo motor with the help of a remote. (IR remote, sensor, servo motor)

Circuit Diagram:



Code:

```
#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");
              Serial.println(results.value, HEX);
        }
        irrecv.resume();
    }
}
```

Observations / Conclusion:

The servo motors rotate clockwise and anticlockwise with the input given by the remote.