

Name – SAI SRIRAM VEMPARALA

Program No. – 13

Program Title – IR based SERVO Motor controller

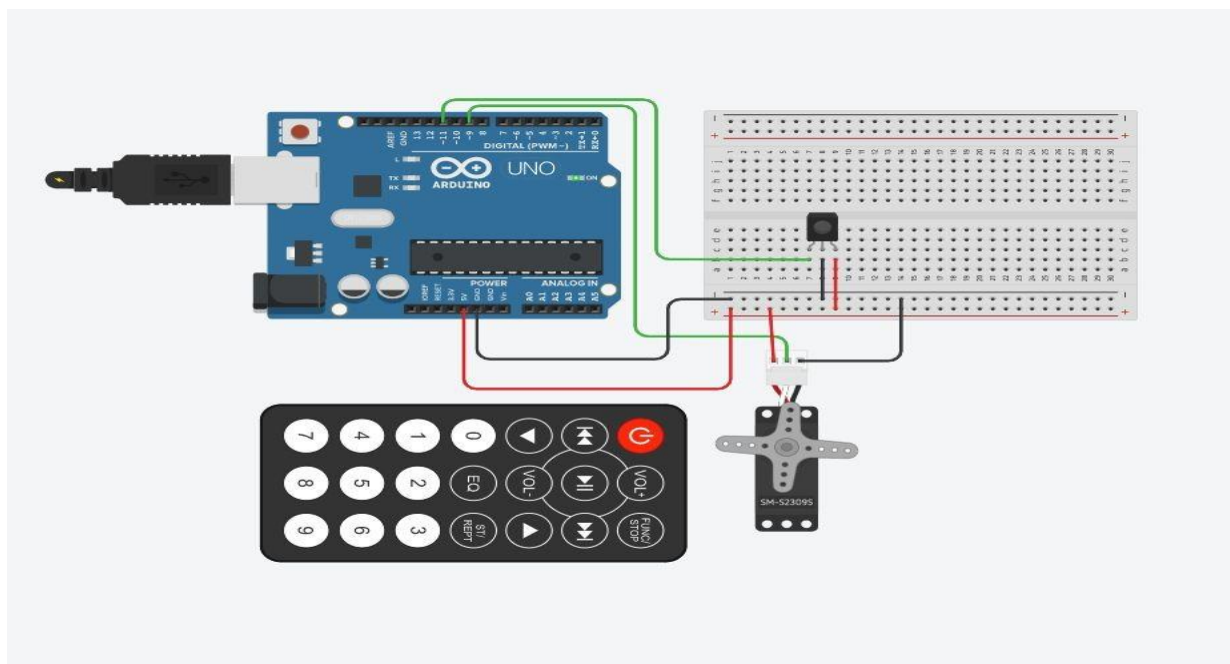
AIM

Design IR based SERVO Motor controller. (Clockwise and CounterClockwise rotation of shaft).

HARDWARES REQUIRED

- Arduino Board,
- Breadboard Small,
- IR Sensor,
- IR Remote,
- Micro Servo

CIRCUIT DIAGRAM



WRITE-UP

PDF

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: 0x");
        Serial.println(results.value, HEX);

        break;
}

irrecv.resume();
}
```

OUTPUT

A screenshot of a 'Serial Monitor' window. The title bar is light gray with a small icon on the left and the text 'Serial Monitor'. The main area is white and contains a series of text lines in a monospaced font. The text is: 'Starting..', 'Clockwise..', 'Clockwise..', 'Counter Clockwise..', 'Counter Clockwise..', and 'Unrecognized code received: 0xFD48B7'.

```
Starting..  
Clockwise..  
Clockwise..  
Counter Clockwise..  
Counter Clockwise..  
Unrecognized code received: 0xFD48B7
```