Program No. – 13

Program Title – IR based SERVO Motor controller

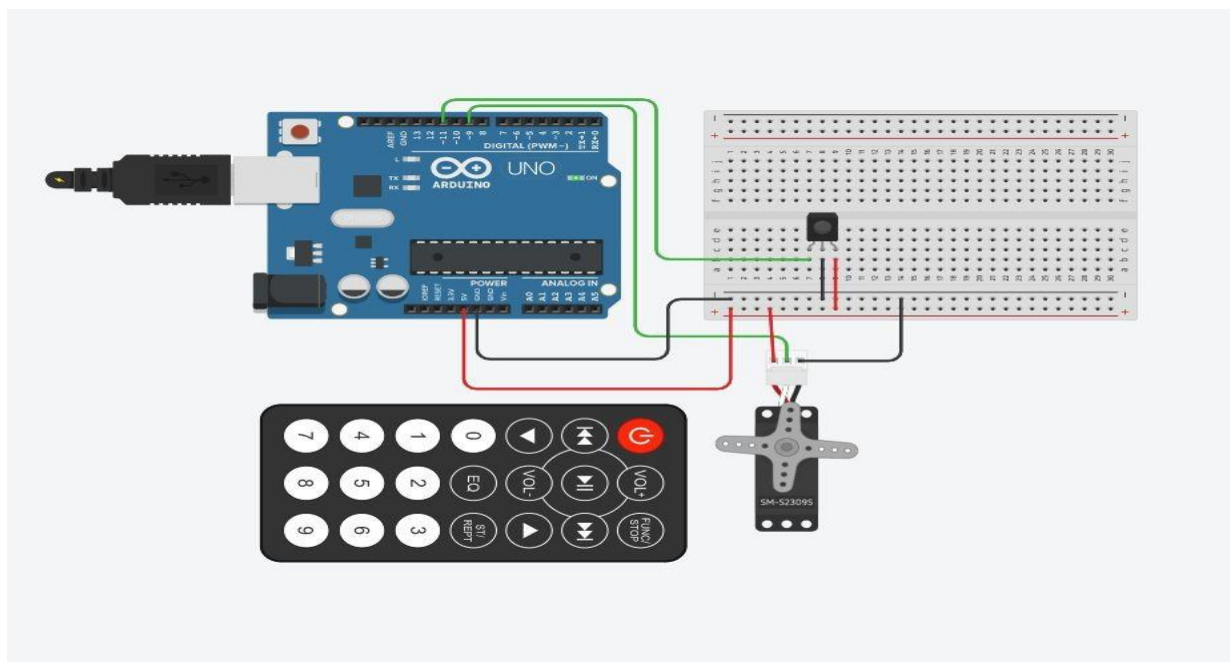
AIM

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

```cpp
#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))
  {
```

```cpp
    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

Serial Monitor

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