# IOT LAB - 5th Sem

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**Program No : 14**

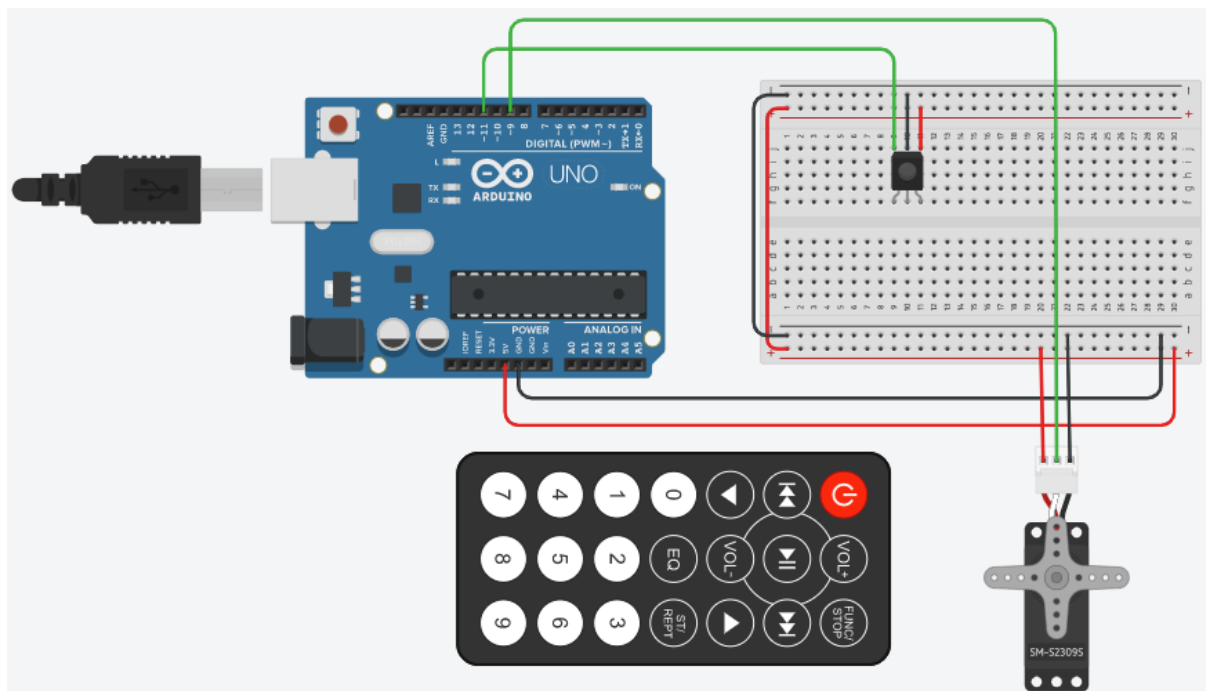**Program Title : IR based SERVO Motor Controller**

**Aim :**

To design IR based SERVO motor controller (Clockwise and Counter) using an Arduino Uno board.

**Hardware Required :**

- Arduino Uno Board
- IR Sensor
- IR Remote
- Micro Servo

**Circuit Diagram :**



**Written Code :**

# Iot LAB - 14

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

int RECV_PIN = 11;
IRrecv irrecv (RECV_PIN);
decode_results results;

Servo myservo;

void setup()
{    Serial.begin (9600);
     irrecv.enable IRIn();
}

void loop()
{    if (irreve.decode (&results))
     {
          switch (results.value)
          {   case 0xFD60FF:
               myservo.attach (9);
               Serial.print ln ("start");
               break;

               case 0xFD609F:
               myservo.write (360);
               Serial.println ("Clockwise");
               break.
```

```cpp
               case 0xFDA05F:
               myservo.write (-360);
               Serial.println ("Counter Clockwise");
               break;
               case   0xFDA05F:
               myservo.attach (7);
               Serial.println ("Stop");
               break;
          }
          irrecv.resume();
     }
}
```

**Observation /Output :**

The Servo motor turns clockwise and counter clockwise upon detection of IR signal from the remote.