Sakshi Srivastava
1BM18CS090

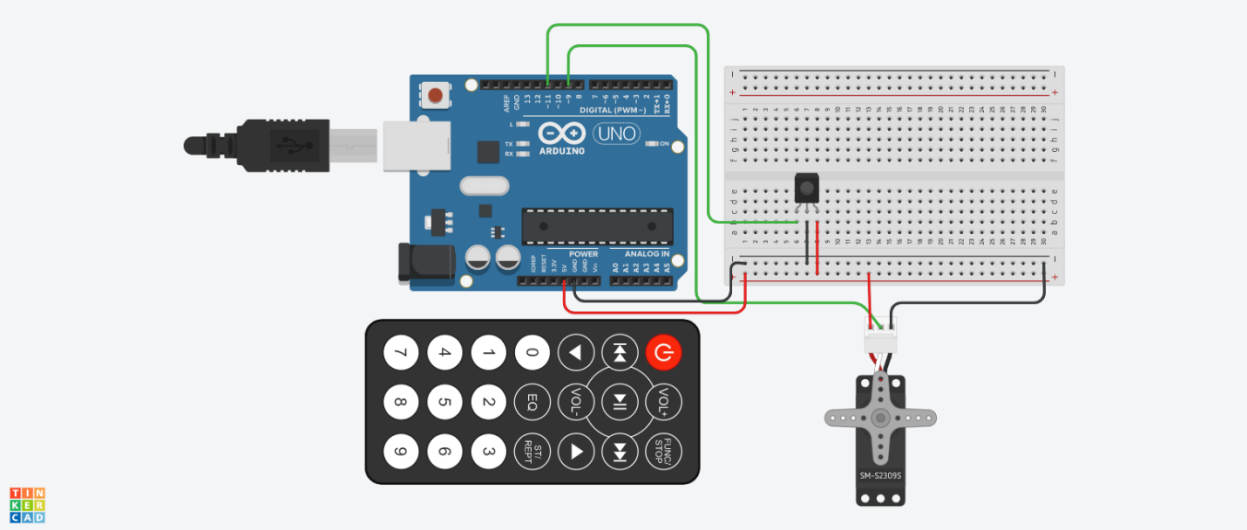
PROGRAM TITLE: IR REMOTE

Aim: DESIGN IR based SERVO MOTOR controller (Clockwise and counterclockwise Rotation of shaft)

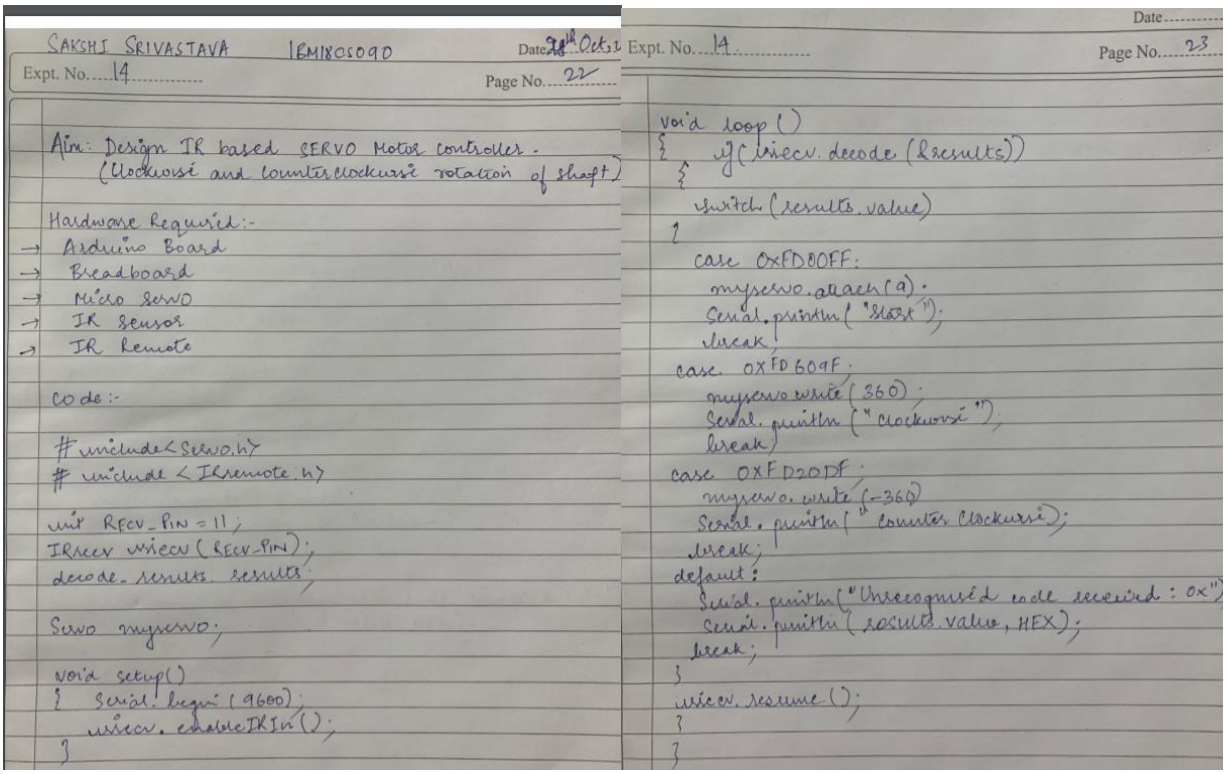
Hardware Required:

- IR remote
- IR sensor
- Micro Servo
- Breadboard
- Arduino UNO

Circuit Diagram:



Write-Up:



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Aim: Design IR based SERVO Motor controller.
(Clockwise and counterclockwise rotation of shaft)

Hardware Required:-
→ Arduino Board
→ Breadboard
→ Micro Servo
→ IR Sensor
→ IR Remote

Code:-

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

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

Servo myservo;

void setup()
{ Serial.begin(9600);
  irecv.enableIRIn();
}
```

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```
void loop()
{ if(irecv.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.println("Unrecognised code received: 0x");
    Serial.println(results.value, HEX);
    break;
  }
  irecv.resume();
  }
}
```

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/Observation:

```
Start
Counter Clockwise
Clockwise
Unrecognized code received:
0xFFFFFFFF
```