

Name – Shreya Laddha

Program No. – 15

Program Title – Smart irrigation system

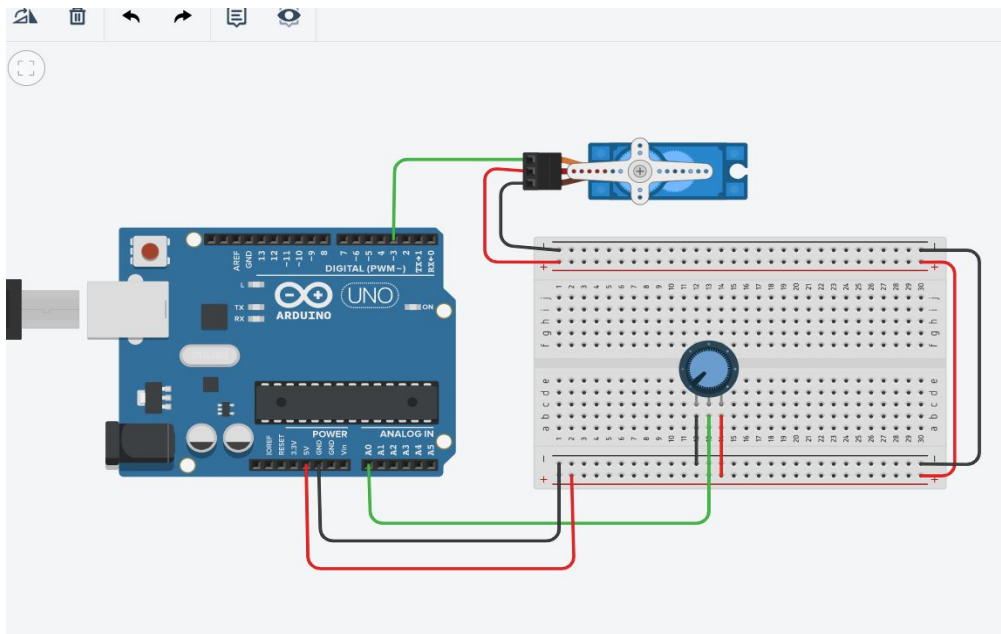
AIM

Design a smart irrigation system (Potentiometer, Servo motor shaft).

HARDWARES REQUIRED

- Arduino Board
- Breadboard Small
- Potentiometer
- Servo motor shaft

CIRCUIT DIAGRAM



WRITE-UP

PFA

CODE

```
#include <Servo.h>

Servo myservo; // create servo object to control a servo
// twelve servo objects can be created on most boards

int pos = 0; // variable to store the servo position

int sensorPin = A0; // select the input pin for the potentiometer
int sensorValue = 0; // variable to store the value coming from the sensor

void setup() {
  myservo.attach(3); // attaches the servo on pin 9 to the servo object
  Serial.begin(9600);
}

void loop() {
  // read the value from the sensor:
  sensorValue = analogRead(sensorPin);

  Serial.println (sensorValue);

  if(sensorValue>500)
  {
    for (pos = 0; pos <= 180; pos += 1) { // goes from 0 degrees to 180
degrees
```

```

// in steps of 1 degree

myservo.write(pos);          // tell servo to go to position in variable 'pos'
delay(15);                   // waits 15ms for the servo to reach the position
}

for (pos = 180; pos >= 0; pos -= 1) { // goes from 180 degrees to 0 degrees

  myservo.write(pos);        // tell servo to go to position in variable 'pos'
  delay(15);                 // waits 15ms for the servo to reach the position
}
}

delay (1000);
}

```

OUTPUT

Designed a smart irrigation system (Potentiometer, Servo motor shaft).

