

PROGRAM NO: 15

PROGRAM TITLE: Smart Irrigation

AIM: Design a smart irrigation system.

HARDWARE REQUIRED: Arduino, Breadboard, Potentiometer, Servo motor shaft

CODE:

```
#include < servo.h>
servo myservo;
int pos = 0;
int sensorPin = A0;
int sensorValue = 0;
void setup()
{
    myservo.attach(3);
    Serial.begin(9600);
}
void loop()
{
    sensorValue = analogRead(sensorPin);
    Serial.println(sensorValue);
    if (sensorValue > 500)
    {
        for (pos = 0; pos <= 180; pos += 1)
        {
            myservo.write(pos);
            delay(15);
        }
        for (pos = 180; pos >= 0; pos -= 1)
        {
            myservo.write(pos);
            delay(15);
        }
        delay(1000);
    }
}
```