

Smart Irrigation

Harsha R

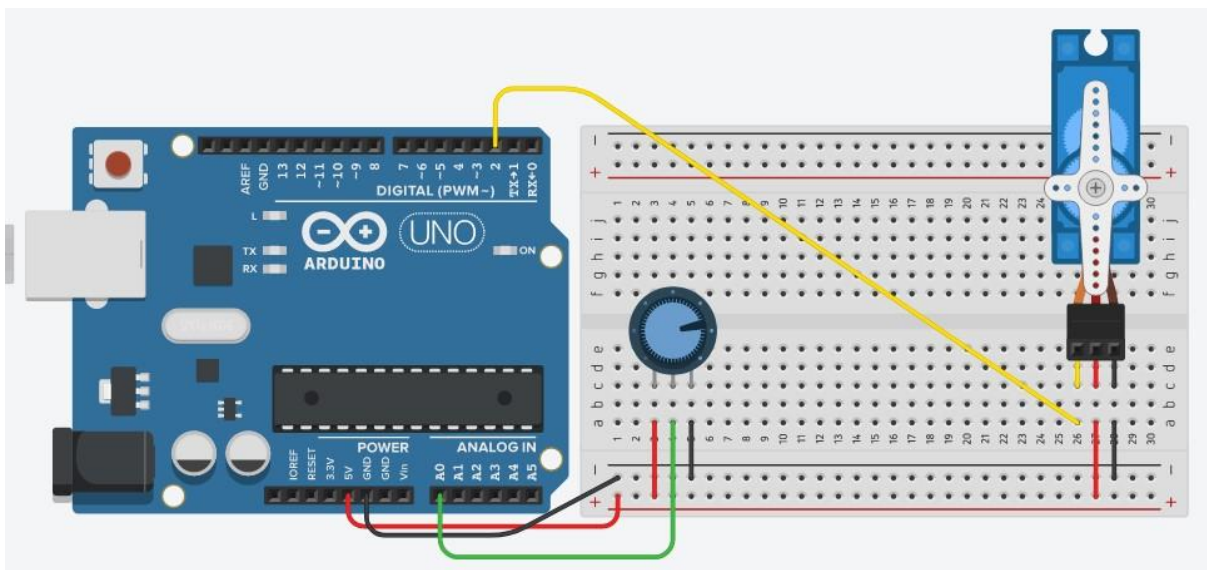
1BM18CS034

Aim : To open and close the valve for water automatically using a moisture sensor .

Hardware Required

- Arduino Board
- Potentiometer
- Servo Motor

Circuit Diagram



Code:

Smart irrigation

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18M1PS0034
Hany

```
#include <Servo.h>
Servo myservo;
int pos = 0;
int sensorPin = A0;
int sensorValue = 0;

void setup() {
  myservo.attach(9);
  Serial.begin(9600);
}

void loop() {
  sensorValue = analogRead(sensorPin);
  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(100);
  }
}
```

Observation /Output

Automatically opens and closes the valve for water when moisture dips below a certain level.