Arduino Sketch

int dry = 280;

int pumpPin = 12;

int soilSensor = 8;

void setup()

{

pinMode(12,OUTPUT);

pinMode(8,INPUT);

Serial.begin(9600);

digitalWrite(pumpPin, HIGH);

delay(10000);

}

void loop()

{

int moisture = analogRead(soilSensor);

Serial.println(moisture);

delay(5000);

if (moisture >= dry)

{

Serial.println("Watering starts now..moisture is " + String(moisture));

digitalWrite(pumpPin, LOW);

delay(5000);

digitalWrite(pumpPin, HIGH);

Serial.println("Done watering.");

}

else

{

Serial.println("Moisture is adequate. No watering needed " + String(moisture));

}

}