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));

 }

}