

CODE

```
#include <LiquidCrystal.h>

const int sensorPin = A0;
const int relayPin = 7;
int moistureLevel = 0;
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

void setup() {
  Serial.begin(9600);
  pinMode(relayPin, OUTPUT);
  digitalWrite(relayPin, HIGH);
  lcd.begin(16, 2);
  lcd.print("Smart Irrigation");
}

void loop() {
  moistureLevel = analogRead(sensorPin);
  Serial.print("Soil Moisture Level: ");
  Serial.println(moistureLevel);
  lcd.setCursor(0, 0);
  lcd.print("Moisture: ");
  lcd.print(moistureLevel);
  lcd.print("  ");
  if (moistureLevel < 300) {
    digitalWrite(relayPin, LOW);
    lcd.setCursor(0, 1);
    lcd.print("Watering...  ");
  } else {
    digitalWrite(relayPin, HIGH);
    lcd.setCursor(0, 1);
    lcd.print("No Watering  ");
  }
  delay(1000);
}
```