A PROJECT PRESENTATION ON-

"SOIL HUMIDITY SENSING USING ARDUINO"

Group Members -

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Overview

This is a mini project which can be used to sense the moisture of soil and to display the percentage on the LCD monitor.

INTRODUCTION

Ours is an agricultural country and irrigation is a very important factor of agriculture. Our system is where farmers can check the humidity easily and determine whether it is needed to irrigate and how much irrigation is needed based on the percentage.

PROS AND CONS

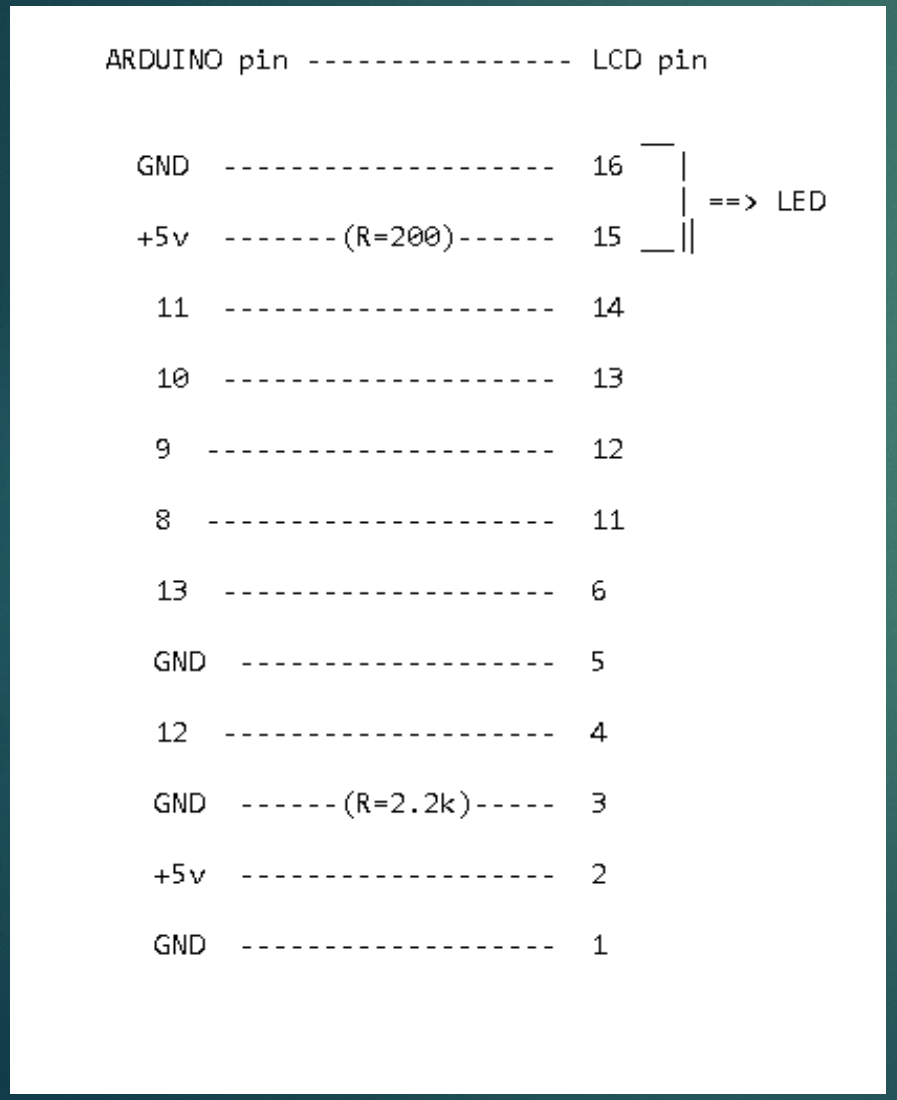
- Low power consumption
- High sensivity
- Operates on low voltege(5v)
- Low depth of detection
- Less accuracy

EQUIPMENTS

1. Arduino UNO -

- Open-source Microcontroller
- Programmed with the Arduino software

LCD PIN CONNECTION AND CODE



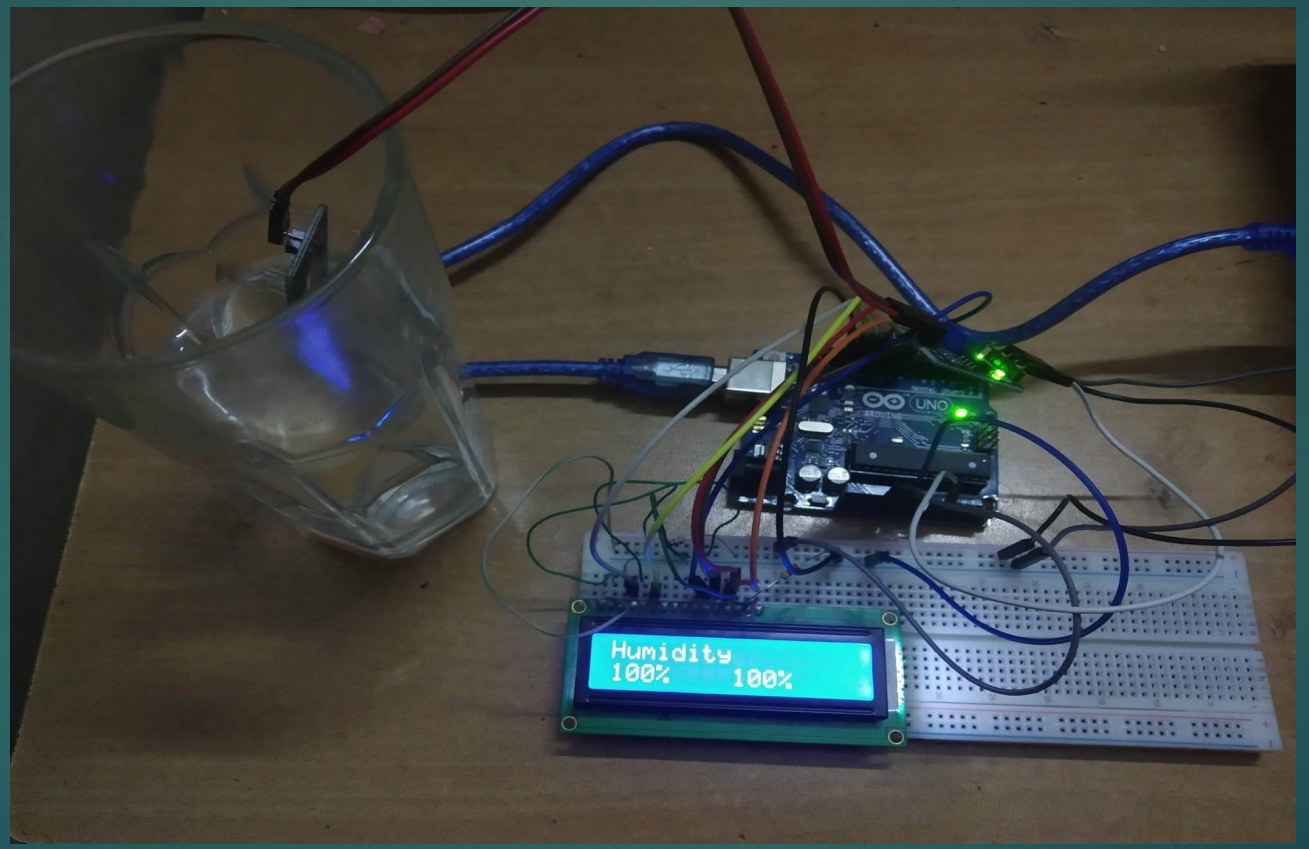

```
int potPin = A1; //input pin
int soil=0;

void setup()
{
lcd.begin(16, 2);
// lcd rows and columns
lcd.print("Humidity");
// title of sorts
}

void loop()
{
// map the values
int soil = analogRead(potPin) ;
soil = constrain(soil, 485, 1023);
soil = map(soil, 485, 1023, 100, 0);

lcd.setCursor(0, 1);
//display final numbers
lcd.print(soil);
//print the percent symbol at the end
lcd.print("%");
//wait 0.1 seconds
delay(75);
//wipe the extra characters
lcd.print(" ");
//lcd.println();
delay(1);
}
```

Diagram



Conclusion