

Water Irrigation system: Group -04

```
int soilpin = A0;
```

```
int soiloutput;
```

```
int watersensor = 9;
```

```
int waterlevel=0;
```

```
int relaypin = 8;
```

```
#include <Wire.h>
```

```
#include <LiquidCrystal_I2C.h>
```

```
LiquidCrystal_I2C lcd(0x27,20,4);
```

```
void setup() {
```

```
    Serial.begin(9600);
```

```
    pinMode(watersensor, INPUT);
```

```
    pinMode(relaypin, OUTPUT);
```

```
    digitalWrite(relaypin, HIGH);
```

```
}
```

```
void loop() {
```

```
    soiloutput= analogRead(soilpin);
```

```
    soiloutput = map(soiloutput,550,0,0,100);
```

```
    Serial.print("Mositure : ");
```

```
    Serial.print(soiloutput);
```

```
    Serial.println("%");
```

```
    if( digitalRead(watersensor) == LOW) {
```

```
Serial.println("No Water Detected");  
if(soiloutput<20.00){  
    digitalWrite(relaypin, LOW);  
    Serial.println("Motor On");  
}  
else if(soiloutput>30.00){  
    digitalWrite(relaypin, HIGH);  
    Serial.println("Motor Off");  
}  
}else {  
    Serial.println("Water Detected");  
    digitalWrite(relaypin, HIGH);  
    Serial.println("Motor Off");  
}  
delay(1000);  
}
```

Relay board:

```
int in1 = 8;  
void setup() {  
    pinMode(in1, OUTPUT);  
    digitalWrite(in1, LOW);  
}  
void loop() {  
}
```