

## CODE OF THE PROJECT THAT WILL STIMULATE OF TINKER CAD-

LINK -

[www.tinkercad.com/things/dgDDwmyFdBs-automated-irrigation-system/editel](http://www.tinkercad.com/things/dgDDwmyFdBs-automated-irrigation-system/editel)

```
#include <LiquidCrystal.h>
```

```
const int LM35 = A0;  
const int motor = 13;  
const int LedRed = 12;  
const int LedGreen = 11;
```

```
LiquidCrystal lcd(2, 3, 4, 5, 6, 7);
```

```
void setup() {  
  Serial.begin(9600);  
  lcd.begin(16, 2);  
  lcd.print("Automated");  
  lcd.setCursor(0,1);  
  lcd.print("irrigation system!");  
  pinMode(motor, OUTPUT);  
  pinMode(LedRed, OUTPUT);  
  pinMode(LedGreen, OUTPUT);  
  delay(2000);  
  lcd.clear();  
  lcd.setCursor(0,0);  
  lcd.print("Temp= ");  
  lcd.setCursor(0,1);
```

```
lcd.print("WaterPump= ");
}

void loop() {

    int value = analogRead(LM35);
    float Temperature = value * 500.0 / 1023.0;
    lcd.setCursor(6,0);
    lcd.print(Temperature);
    lcd.setCursor(11,1);

    if (Temperature > 48){
        digitalWrite(motor, HIGH);
        digitalWrite(LedRed, HIGH);
        digitalWrite(LedGreen, LOW);
        lcd.print("ON ");
    }
    else {
        digitalWrite(motor, LOW);
        digitalWrite(LedRed, LOW);
        digitalWrite(LedGreen, HIGH);
        lcd.print("OFF");
    }

    delay(1000);
}
```