# Experiment 3.1

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**Subject Name: IOT LAB Subject Code: 20CSP\_358**

# Aim:

To display Hello World on LCD using Arduino Uno.

# Objective:

* + Learn about IoT based simulations.
  + Learning the circuitry.

# Code-Output:

## Hardware Requirement o Arduino Uno

* + - LCD 16x2

## Jumper Wire

**About LCD :**

A Liquid Crystal Display commonly abbreviated as LCD is basically a display unit built using Liquid Crystal technology. When we build real life/real world electronics based projects, we need a medium/device to display output values and messages. The most basic form of electronic display available is seven segment display, which has its own limitations. The next best available option is Liquid Crystal Displays which comes in different size specifications. Out of all available LCD modules in market, the most commonly used one is 16×2 LCD Module which can display 32 ASCII characters in 2 lines (16 characters in 1 line). Other commonly used LCD displays are 20×4 Character LCD, Nokia 5110 LCD module, 128×64 Graphical LCD Display and 2.4 inch TFT Touch screen LCD display.

**Circuit And Output :**

int sensorValue;

int digitalValue;

void setup()

{

Serial.begin(9600); // sets the serial port to 9600

pinMode(13, OUTPUT);

pinMode(2, INPUT);

}

void loop()

{

sensorValue = analogRead(0); // read analog input pin 0

digitalValue = digitalRead(2);

if (sensorValue > 400)

{

digitalWrite(13, HIGH);

}

else

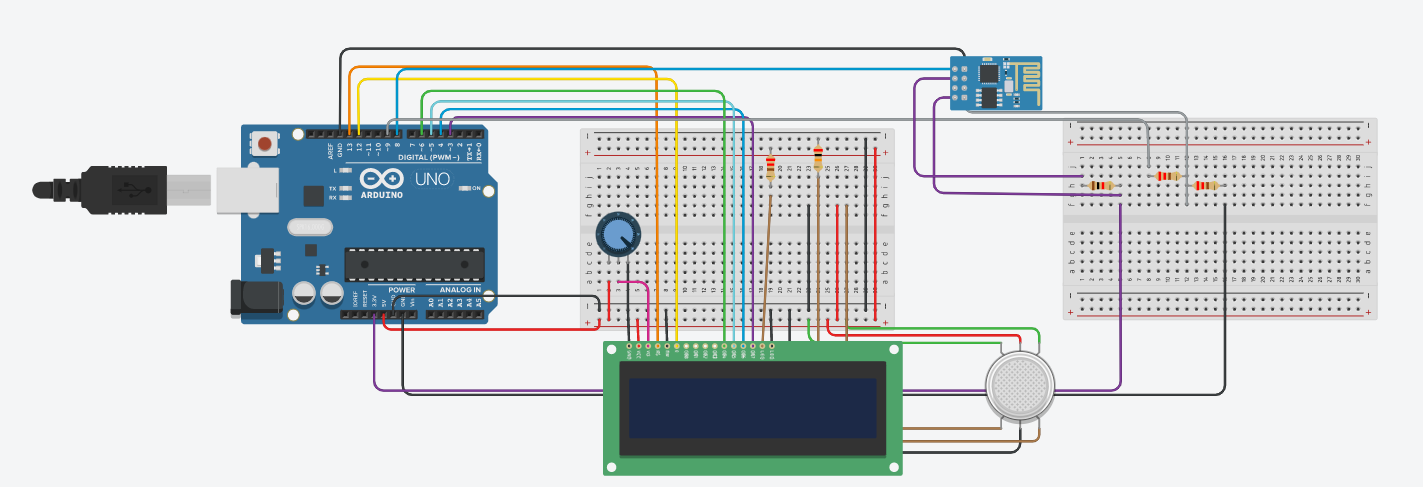
digitalWrite(13, LOW);

Serial.println(sensorValue, DEC); // prints the value read

Serial.println(digitalValue, DEC);

delay(1000); // wait 100ms for next reading

}

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