Experiment-2.3

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Aim: To display data generated by sensor on LCD using Arduino/ Raspberry Pi.

Objectives:

1. Learn how to make connections with Arduino board .
2. Learn using LCD with Arduino.

Components Required:

Arduino Uno board, LCD display, Jumper wires, Arduino IDE

Circuit Diagram:

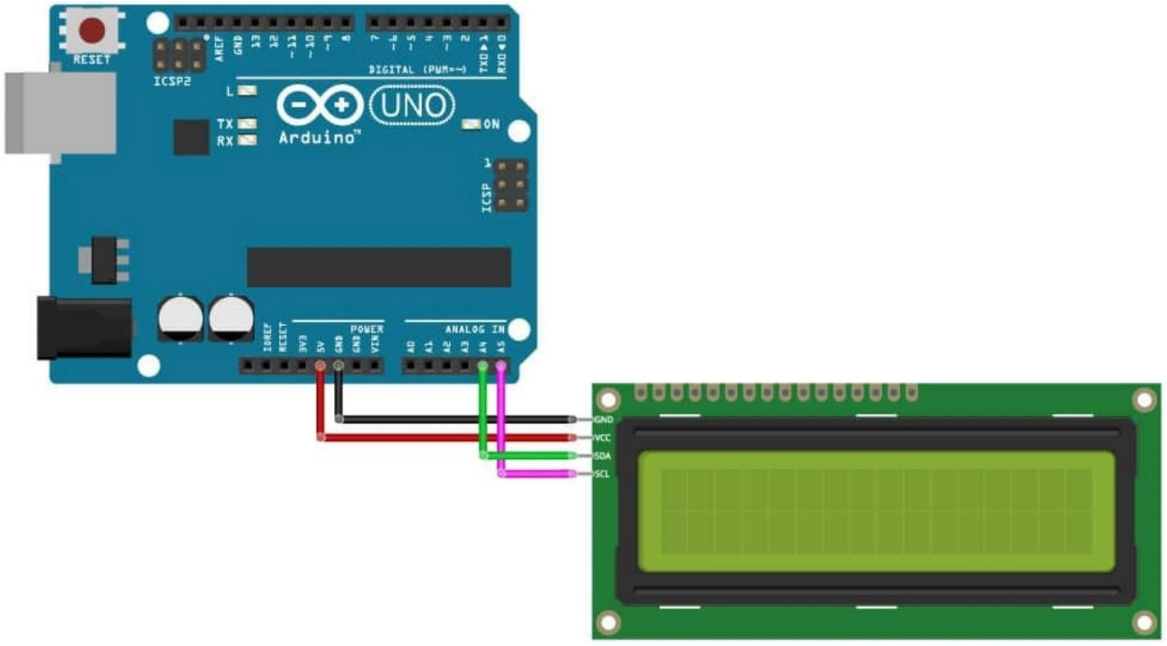

Fig - Circuit Diagram of Connections of LCD with Arduino

Script & Output:

1. (a)Code in Arduino IDE -

```
#include <LiquidCrystal_I2C.h>

//included the library of I2C LCD

LiquidCrystal_I2C lcd(0x27, 16, 2);

//declared the I2C LCD


void setup(){

lcd.init();

//used the built-in function of keypad library function to initialize the LCD

lcd.backlight();

//turn on the backlight of LCD

lcd.print("HELLO CU");

// print on the LCD

}

void loop(){

}
```

(b) Simulation-

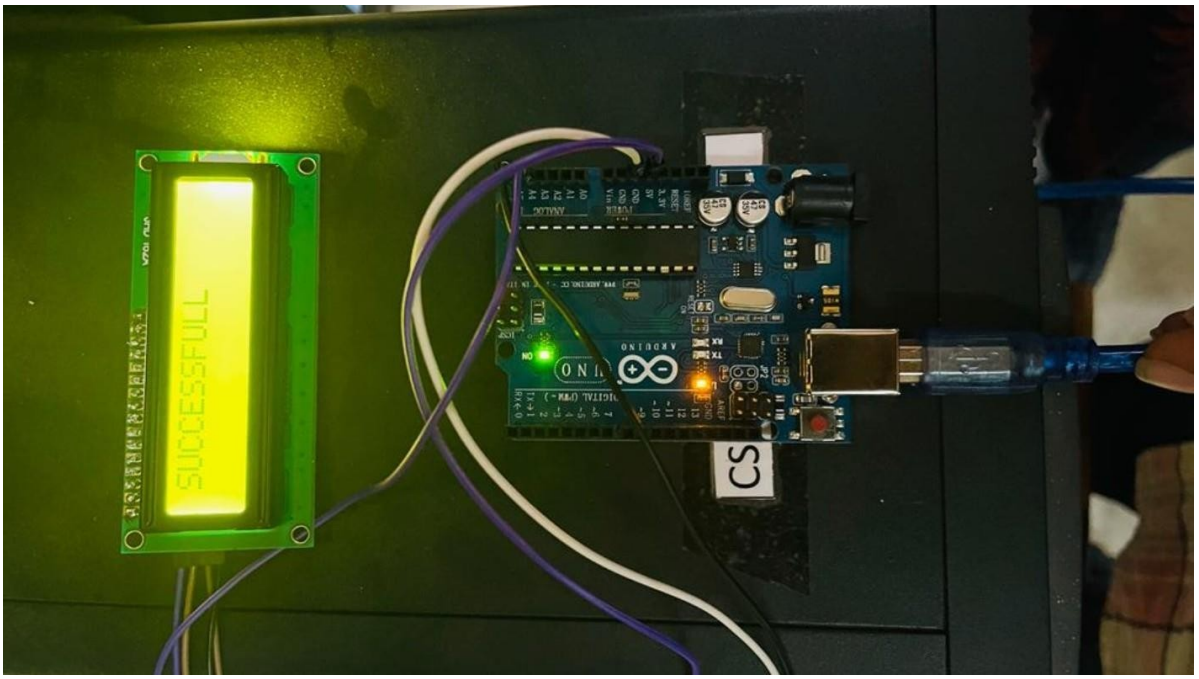

Fig - Final Output with LCD Displaying "SUCCESSFULL"

Result:

1. We see our LCD displaying "SUCCESSFULL".

Conclusion:

1. We learned to use LCD with Arduino.
2. We learned to make the connections with Arduino Board.