Al-Mustaqbal University
Department of Advanced digital design
Class: four
Subject: Medical electronic system lab
Lecturer: Dr. zahraa hashim
Eng. Ali Ibrahim
Eng.Raneen Moaid

" **Arduino Uno LCD Experiment** "

Objective The experience provides an opportunity to take advantage of the benefits of using LCDs, simplifying the wiring process and saving resources, making it easier for you to create more complex and efficient Arduino projects.

Materials:

1. Arduino board (e.g., Arduino Uno)

2. Variable resistance

3 . wires

4.LiquidCrystal Display(LCD)
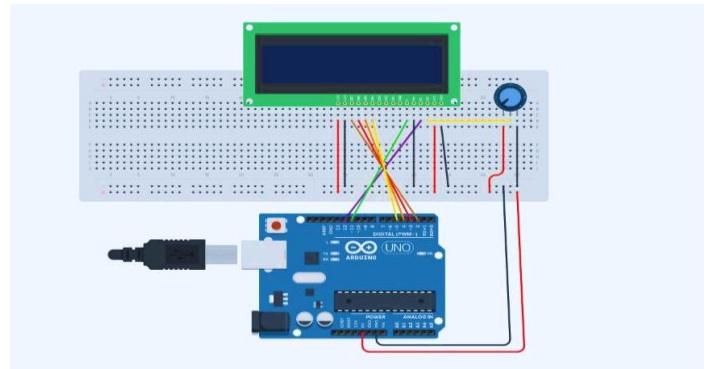
Steps:

1. Connecting the Display: Connect the LCD display to the Arduino using the ready wires or solder it yourself. Make sure to connect the wires correctly according to the monitor connection guide.

2. Load LCD Library: Load the LCD library to the Arduino IDE. You can find this library by going to "Sketch" -> "Include Library" -> "Manage Libraries" and searching for "LiquidCrystal" and then install it.

3. Write the code: Use the following code as a template to get started

Arduino Code:

```
#include <LiquidCrystal.h>

  const int rs = 12 , en = 11 , d4 = 5 , d5 = 4 , d6 = 3 , d7 = 2;

  LiquidCrystal lcd(rs,en,d4,d5,d6,d7);


  void setup() {
  lcd.begin(16,2);


  }


  void loop() {
  lcd.setCursor(0,0);
  lcd.print("ELECTRONICS");


  }
```

4. Upload the code to the Arduino: Connect the Arduino to your computer and upload the code to the Arduino using the Arduino IDE.

5. View results: Once the program loads, you will see "Hello, world!" on the LCD screen if it is connected correctly.