Lab 3. LCD Display

02/10/2024

0/15 Points

Attempt 1 Review Feedback

Offline Score: **0/15** Add Comment

Anonymous Grading: **no**

Unlimited Attempts Allowed

Details

LCD Display

Hardware Required

- Arduino Board
- LCD Screen (compatible with Hitachi HD44780 driver)
- pin headers to solder to the LCD display pins
- 10k ohm potentiometer
- 220 ohm resistor
- hook-up wires
- breadboard

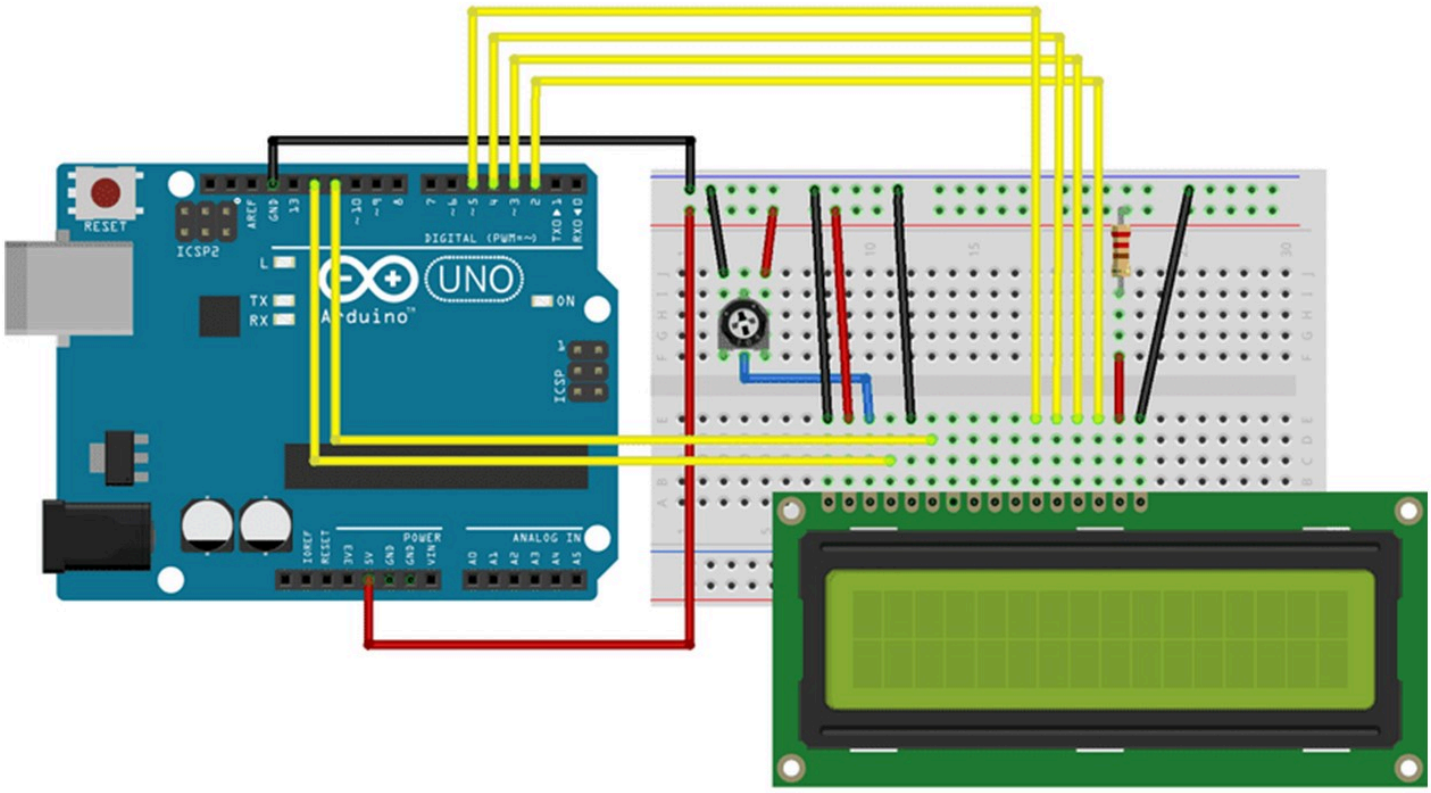
Circuit

Before wiring the LCD screen to your Arduino board we suggest to solder a pin header strip to the 14 (or 16) pin count connector of the LCD screen, as you can see in the image above. To wire your LCD screen to your board, connect the following pins:

- LCD RS pin to digital pin 12
- LCD Enable pin to digital pin 11
- LCD D4 pin to digital pin 5
- LCD D5 pin to digital pin 4
- LCD D6 pin to digital pin 3
- LCD D7 pin to digital pin 2

Additionally, wire a 10k pot to +5V and GND, with it's wiper (output) to LCD screens VO pin (pin3). A 220 ohm resistor is used to power the backlight of the display, usually on pin 15 and 16 of the LCD connector

Wiring Diagram



Arduino Code:

http://www.arduino.cc/en/Tutorial/LiquidCrystalDisplay

Note:

You can also find this code on Arduino's IDE. Go to file / Examples /Liquid Crystal/Display

http://www.arduino.cc/en/Tutorial/LiquidCrystalDisplay

View Rubric

Lab 3. LCD Display

Criteria	Ratings					Pts
Description of criterion view longer description	**5 pts** **Well done!**	**3 pts** **Close** The implementation slightly differs from the instructions.	**2 pts** **Getting There** The implementation shows two slight differences or one larger difference from the implementation.	**1 pts** **Needs Improvement** The implementation differs in significant ways from the instructions.	**0 pts** **Insufficient** The circuit is missing or it shows little resemblance with the instructions.	/ 5 pts
Output view longer description	**10 pts** **Well done!**			**0 pts** **Differs from expected output**		/ 10 pts
						Total Points: 0

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