Lab 6. Timer

Timer

A Digital Decoder IC, is a device which converts one digital format into another and one of the most commonly used devices for doing this is called the Binary Coded Decimal (BCD) to 7-Segment Display Decoder.

7-segment LED (Light Emitting Diode) or LCD (Liquid Crystal Display) type displays, provide a very convenient way of displaying information or digital data in the form of numbers, letters or even alphanumerical characters.

Buzzer

A buzzer is a device, which makes a buzzing or beeping noise.

Hardware Required (Circuit AND-OR):

- Hardware Required:
- · Arduino or Genuino Board
- · Display Decoder
- Four (4) 10K resistors to connect the d-switch
- Two(2) 220 Ohm resistor to connect the display
- 1 resistor 100 Ohm from the buzzer
- 1 Buzzer
- Dip-switch
- (n) hook-up wires
- breadboard

Open the file below:

Schematic:

Download the file:

<u>TimerLab.asm (https://slcc.instructure.com/courses/1004604/files/165676622/download?wrap=1)</u> ↓ (https://slcc.instructure.com/courses/1004604/files/165676622/download?download_frd=1)

<u>Timer.ino (https://slcc.instructure.com/courses/1004604/files/165676649/download?wrap=1)</u> ↓ (https://slcc.instructure.com/courses/1004604/files/165676649/download?download_frd=1)