# EEE339

## Assignment 1
## Digital clock manual

**Name:** Sahand Sabour                    **Student ID:** 1614650

## Functions

1) 4-digit minute and second display (MM: SS)

2) 4-digit stopwatch with second and tenth of a second display (SSS: DS)

3) Up/Down counting

4) Timer with flashing LEDs

5) Multitasking (ability to change screens to display 1 and 2)

6) Time setting

## Switch and keys guide

**SW0 =>** To run the clock (Enable)

**SW1 =>** Reset the clock to 0000 (Clear)

**SW2 =>** Change the counting direction for the clock (Up/Down counter)

**SW3 =>** Change the display (show stopwatch or clock)

**SW4=>** To run the stopwatch (Enable)

**SW5 =>** Reset the stopwatch to 0000 (Clear)

**SW6 =>** Change the counting direction for the stopwatch (Up/Down counter)

**KEY0 =>** Increase the value of display 0 by 1

**KEY1 =>** Increase the value of display 1 by 1

**KEY2 =>** Increase the value of display 2 by 1

**KEY3 =>** Increase the value of display 3 by 1

**NOTE:** The 7 segment LED displays are numbered from right to left; indicating the leftmost display as 3 and the rightmost display as 0.

**NOTE:** Keys 0-3 would only have an effect if the counter is paused: enable switch is down.