

ECE238 – Lab 3.

Name:.....

Date:.....

Section:.....

Part 1

Design a system able to count from 0 to 99. An input signal 'clk' (implemented with a button of the board) will be used to clock the counter. Whenever the button is pushed the counter value will be incremented by 1. In addition, two input signals named 'pause' and 'reset' are used to pause the counter and to reset it, as explained in the tutorial. Simulate the system and then implement on the board. Use the Discrete LEDs to project the numerical value (in binary) of the counter output.

Part 2

Modify your counter, such that it can be told to have an increasing and a decreasing count.