LAB Assignment #1 for ECE 443

Assigned: Tue., Sept. 4, 2012
Due: Thur., Sept. 6, 2012

Description: Implement a simple combinational circuit that maps the push-buttons to LEDs.

This assignment is intentionally kept simple to allow you to get familiar with the Xilinx FPGA software tools.

You will use three (of the four) pushbuttons, Btn1, Btn2 and Btn3 as input and and three (of the eight) LEDs, LD1, LD2 and LD3 as output. Write the structural VHDL code necessary connect the Btns to the LDs, such that pressing Btnx lights up LDx, where x is 1, 2 or 3.

Laboratory Report Requirements:

1) Turn in a commented copy of your VHDL code.
2) Turn in the schematic diagram that represents the synthesized schematic of the code.

Grading:
The grading from this lab will be based entirely on your in-class demo. Bonus points will be given to any implementation feature that goes above and beyond the requirements.