Lab 1 Report

by

Jonathan Huynh

Adam Godfrey #015981472

Instructor: Dr. Mohamed Aly

Class: ECE 3300L .E02-OU - Verilog Design

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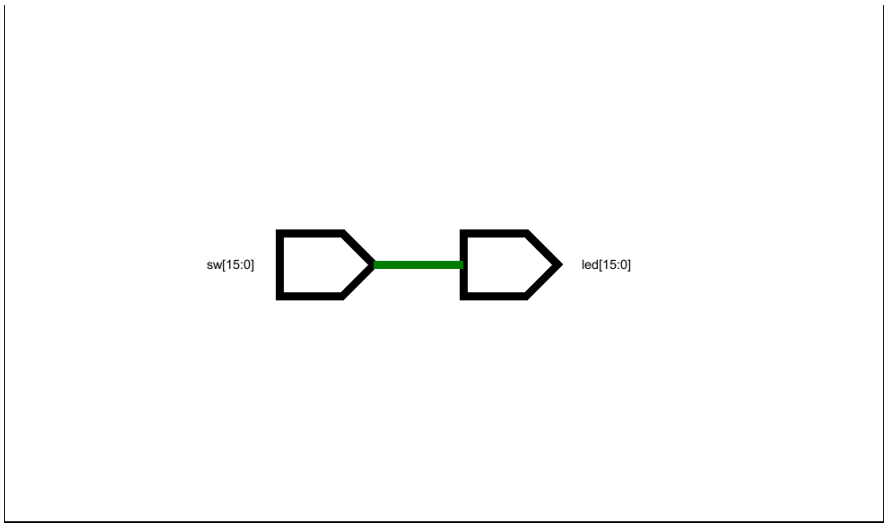
Summary:

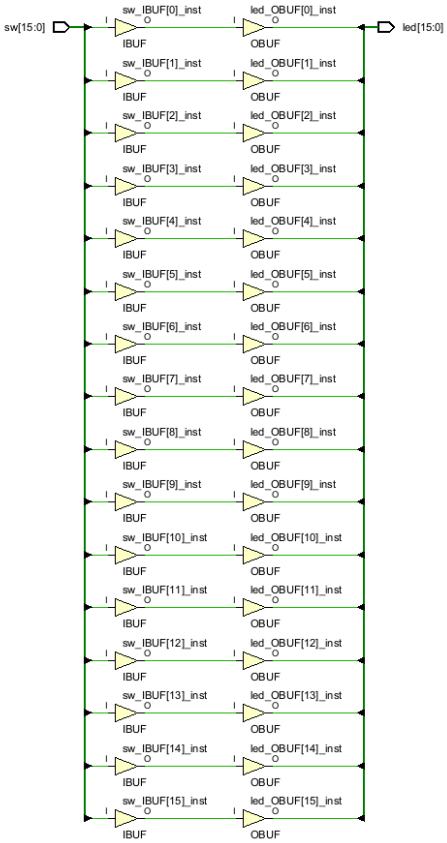
With Lab 1, our purpose was to be introduced into verilog, our HDL, and learn a very basic program and execution to it. Our lab was creating a module that linked the 16 switches to our 16 board LEDs. It was a good soft introduction into basic logic and how to write mappings for the board. The lines (`sw[15:0]) for the 16 switches controls one of the (led[15:0]) LED's. With the ```assign led = sw;``` we are able to make it so when the switch is flipped, our LED then turns on. This is ensured via the mapping written in our XDC file. The XDC file code makes sure that our logical ports for our switches and LED are properly routed to the physical pins we will be flipping on board.

Link To Video:

https://youtu.be/CoxNDC_a79I

LUT Image:


sw[15:0]
led[15:0]


sw[15:0]
led[15:0]
sw_IBUF[0]_inst
led_OBUF[0]_inst
IBUF
OBUF
sw_IBUF[1]_inst
led_OBUF[1]_inst
IBUF
OBUF
sw_IBUF[2]_inst
led_OBUF[2]_inst
IBUF
OBUF
sw_IBUF[3]_inst
led_OBUF[3]_inst
IBUF
OBUF
sw_IBUF[4]_inst
led_OBUF[4]_inst
IBUF
OBUF
sw_IBUF[5]_inst
led_OBUF[5]_inst
IBUF
OBUF
sw_IBUF[6]_inst
led_OBUF[6]_inst
IBUF
OBUF
sw_IBUF[7]_inst
led_OBUF[7]_inst
IBUF
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sw_IBUF[8]_inst
led_OBUF[8]_inst
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