Revision **0**

*Note: Late HW is **not** accepted! Put your* <mark>*"last name, first name," the course number (3701), and the*</mark> <mark>*HW number*</mark> *in the* <mark>*top right hand corner*</mark> *of the first page of* <u>***all***</u> *HW assignments. Also for* <u>***all***</u> *homework, use file name* **`HWx.pdf`**. *Do* <mark>***NOT***</mark> *put your social security number or your UF ID number on your HW.*

From the Lam book problems:

> 7.3, 7.5, 7.8, 7.15, 7.18

> 7.19   => convert to an ASM chart
>   => implement the system using a ROM and JK flip-flops only
>   => with X1.H, X2.L, Z1.H, Z2.L, Z3.H
> 7.23

Redo your Lab 2 combinatorial circuits **for the Hex to 7-Segment Decoder**, replacing the ANDs, ORs, NOTs, etc. with VHDL code. (See the *Creating graphical components* file on the website for information on how to incorporate VHDL code in a bdf file. This file can be found on the Software/Docs adjacent to the Quartus heading.)

a) Include a copy of your VHDL file in your pdf submission. Be sure to put your name, the HW number, the due date and the description of what the file is supposed to do in the comments section at the beginning of the file.

b) Make a component with your VHDL file, replace your Lab 2 combinatorial elements, and adequately simulate the entire design. Also put a copy of the bdf file in your pdf submission.