TUTORIAL HOMEWORK (Due date: Friday, March 25th, at 23:59 p.m.)

Prepare your own Pspice tutorial for logic circuit simulations. Use PowerPoint and convert your final document to pdf. Your tutorial must cover followings:

(Read each item below, then watch the videos and find your answers.)

- 1. How to open a new project?
- 2. How to add necessary libraries for logic circuit simulations?
 - Watch Video 1.
 - Which libraries would be enough?
 - Describe each step with text and screen shots.
- 3. How to add logic gates to your schematic from the library?
 - Find and introduce simple logic gates, such as Inverter, AND, OR, NAND, NOR, XOR, XNOR, in the library. Show their images with their IC codes.
- 4. How to generate a truth table using signals?
 - Which components do you need?
 - Describe how to do that.
 - Think over the signals (signal type, frequency, period) and comment.
- 5. How to simulate a logic circuit?
 - Choose a logic gate as an example and verify its truth table. Show each step.
 - How would the simulation profile be?

Watch <u>Video 2</u>. Review and improve your answers.

6. Build the logic circuit given in <u>Video 3</u>. Repeat the simulation as a practice and add into your tutorial. Comment before and after each step.

Your tutorial should not be very long. Give only brief information with your examples. Insert screenshots for the software interface, schematics and simulation results.

This homework is just practicing what you watched in video tutorials. Do not get lost in details. These information will help you a lot for your preliminary reports.

You will submit your homework to ytubme2322@gmail.com

Mail Subject: tutorial

FileName: Name_Surname_StudentID.pdf