

King Fahd University of Petroleum and Minerals  
College of Computer Sciences and Engineering  
Department of Computer Engineering

COE 202 – Fundamentals of Computer Engineering (T102)

**CAD Assignment # 01 (due date & time: Wednesday 04/05/2011 during class period)**

**\*\*\* Show all your work. No credit will be given if work is not shown! \*\*\***

Using the “*LogicWorks*” tool, build the circuit of Problem # 3 of Homework # 04 with only **NAND** gates. Label all inputs and outputs. Verify that your circuit is functioning properly by applying all input combinations. Use the “*Hex Keyboard*” device under the “Simulation IO” library to connect to the inputs of your circuit instead of using “*Binary Switches*.”

Save your circuit and name the file “*CAD01\_yourStudentID.cct*”.

**Deliverables:**

1. Send a soft copy of your circuit file to both myself ([marwan@kfupm.edu.sa](mailto:marwan@kfupm.edu.sa)) and the grader ([s200993870@kfupm.edu.sa](mailto:s200993870@kfupm.edu.sa)) with the “subject” line being “*COE202-CAD01-yourStudentID*”.
2. Submit a printout of the circuit window. Make sure that the entire circuit appears in the printout.
3. Submit a printout of the timing window after applying all input combinations. Make sure to zoom-in as far as you can inside the timing window before printing. Also, make sure that both the sets of inputs and the sets of outputs show up in the printout.