

Computer Architecture

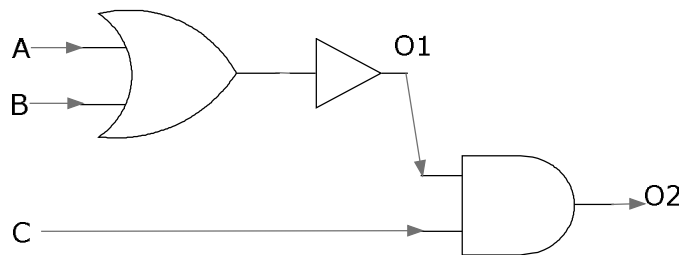
Assignment 1

Due: Next week section. (one day before if you submit by email)

Notes: This assignment is individual assignment, every student should complete it by himself.

- 1. (10 points) Logic Gates revision:** (if you need help, Referee to William stalling's book, Chapter 20)

a. Create the truth table for the following circuit:



b. Draw a logic circuit for the following operation.

$$(A \oplus B) \cdot \bar{C}$$

- 2. (10 points) Semiconductors.** (If you need help, Referee to William stalling's book, Chapter 5)
- Give a short description for DRAM and SRAM, and explain the Advantage, Disadvantage, and Usage of each.**
 - Compare between SDRAM, DDR, and RDRAM with respect to Clock frequency, Transfer time, Access time, and Pin count.**