

CS 207 Digital Logic - Spring 2020

Assignment 4

Deadline: Friday, May 8

Write down your answer to the questions on a new sheet with **detailed** procedures.
Drawing the circuit only will lead to zero point.

1. (1.0 points) Develop a combinational logic circuit that will convert 4-bit binary numbers into their corresponding 2's complement form.
2. (1.0 points) Design a binary multiplier that multiplies a 4-bit number, $B_3B_2B_1B_0$, by a 3-bit number $A_2A_1A_0$. The circuit is to be implemented using AND gates and full adders.
3. (1.0 points) Design a combinational circuit that generates the 9's complement of a BCD digit.