CS221: Logic Design



Assignment no 06: Chapter 6

Note: You can check the exercises after the book Chapter. In our assignment, we are using the 11th edition of "Digital Fundamentals" By Thomas L. Floyd"

1. Design a combinational circuit that has a 4-bit Binary input and produces a gray code output.

2. Design a combinational circuit that accepts a 4-bit binary value ABCD, and returns 1 if $5 \le ABCD \le 14$, or 0 otherwise.

3. Design a combinational circuit that counts the number of 1's present in 3 inputs A, B and C. representing that count in binary.

4. Design a combinational circuit that converts binary to BCD.

5. Design 4-bit combinational circuit 2's complement. (The output generates the 2's complement of the input binary number)