

Assignment #1

- 1) Design the CMOS implementation using NMOS and PMOS transistors for a 3-input XNOR gate. Write C code to implement 3- input XNOR (State any assumptions you make)
(Suggestion: First write out the truth table for a 3-input XNOR. Also, make sure if the top part of the circuit connects to the voltage source that the bottom section does not connect to ground for a given input)
- 2) What are the causes for delay in combinational circuits?
- 3) For the circuit given below, write down the boolean function it implements. Write C code to implement the logic function(State any assumptions you make). M0, M1,M2,M3 are NMOS and M4,M5,M6,M7 are PMOS transistors.

