CME 2003 Logic Design

Experiment 5

Design a circuit that displays the odd and even integers between 0-7. Use a 3x8 DEMUX and 2-input AND gates to implement the design.

$$F_1(A, B, C) = \prod (0,2,4,6)$$

$$F_2(A, B, C) = \prod (1,3,5,7)$$

Equipments:

- 74LS138 (DEMULTIPLEXER), 74LS08 (AND) integrated circuits.
- Any other equipments necessary for the experiment.

Preliminary Work:

Draw truth table and logic diagram of the design.
Construct and test the designed circuit in MaxPlus II. Bring the logic diagram and waveform.
Come with your PreLab report and data sheets of the ICs you used in your design.
Prepare the PreLab report individually.