COE211 DIGITAL DESIGN

LAB 4b: Functions of Combinational Logic

Objective

- To learn the different combinational logic circuits such as decoders/encoders, code converters, multiplexers/demultiplexers and parity generators/checkers.

You are required to work individually and answer the following questions.

Exercises

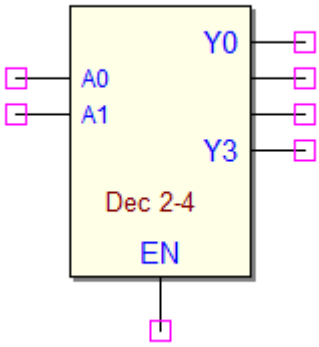
Try out the following exercises before your lab.

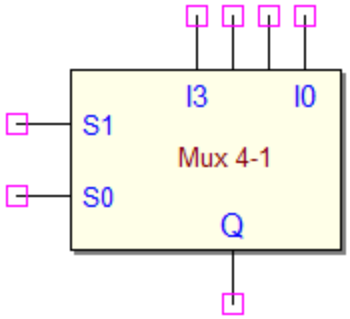
4.22, 4.23, 4.24, 4.27, 4.28(a), 4.31, 4.33, and 4.35.

Simulation:

- Simulate the following logic circuits. Show the working circuit to your TA by providing different values for the inputs.

a. A 2-to-4-line decoder with enable input.
b. A 4-to-1-line multiplexer.





Evaluation

Student is required to submit the following:

• Answers to the exercises 4.33 and 4.35 above.

• The hardcopy of the simulated logic circuit and the results of simulation.

Dateline: The beginning of the next Lab session.