LAB 2

❖ Design Following Circuits using Structured Modeling

1. 4x1 Multiplexer using 2x1 Multiplexer

2. 1x4 Demultiplexer using 1x2 Demultiplexer

3. (i) 2x4 Decoder using component of basic logic gates(use 2/3 input gate if required).
   (ii) 3x8 Decoder using 2x4 Decoder

4. Half Adder using components of basic logic gates.

5. Full Adder using component of Half Adder + basic logic gates.

6. 4-bit Full Adder using component of Full adder.

7. Gray Code Detector with two inputs A and B each of 3-bits.

8. Magnitude Comparator with two inputs A and B each of 2-bits.