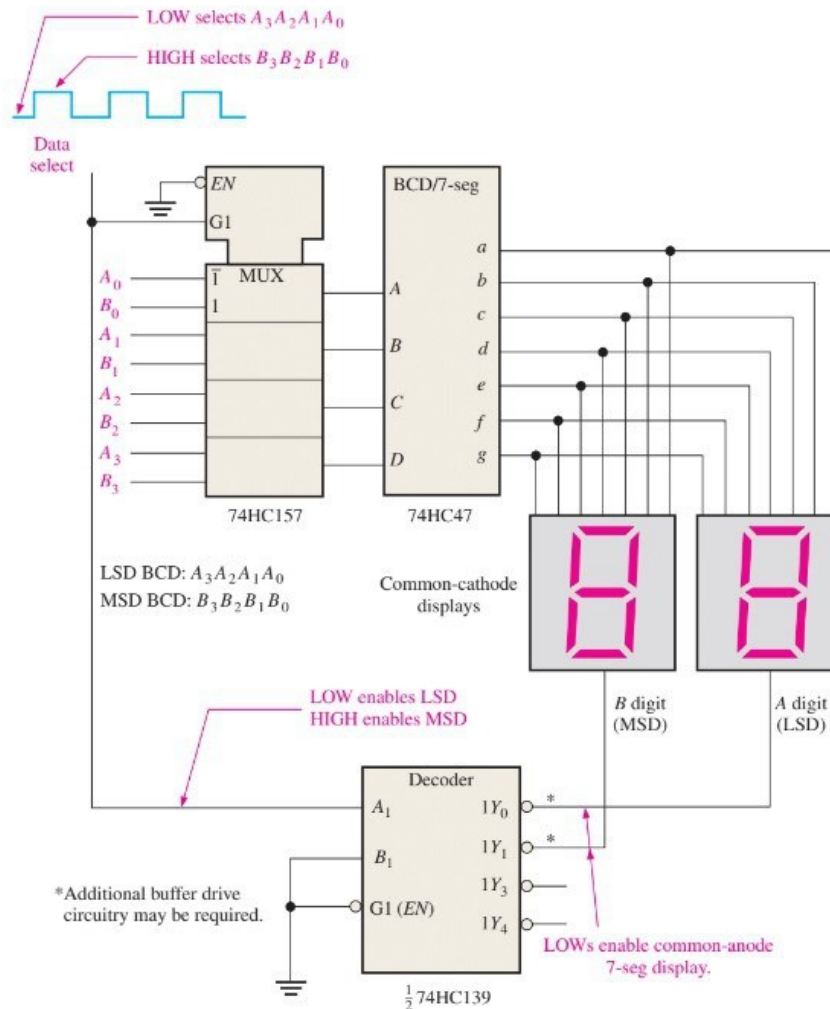


### Homework#1

For the following circuit

- Write a Verilog description for the Quad\_Mux2x1.
- Write a Verilog description for the BCD\_7Segment\_driver.
- Write Verilog Description for the Decoder2x4
- Build the circuit structurally from the above components.
- Write a simple test bench for the circuit.



**FIGURE 6-49** Simplified 7-segment display multiplexing logic.