

Assignments-04: Testbenches

Write testbench for the following circuits (Use \$display and \$monitor at appropriate places)

1. 4-bit Binary to Gray Code Converter
2. 8:3 Priority Encoder
3. 3:8 Decoder
4. 4:1 Multiplexer
5. 1:4 Demultiplexer
6. 2-bit Magnitude Comparator ($A > B$, $A == B$, $A < B$) (Extent it upto 4 bit comparator)
7. Adder-Subtractor
8. 4-Bit Multiplier
9. BCD Adder
10. Barrel Shifter
11. Arithmetic and Logical Unit (ALU)