

## Week 8 Lab experiment

1. Design a decoder using Structural (2:4) and Behavioral(3:8) model.
2. Design a encoder using Structural (4:2) and Data flow(8:3) model.
3. Design and implement a full Subtractor using two 4x1 multiplexers. Simulate using HDL.
4. Design a 4-bit high priority encoder using Structural and Behavioral model.
5. Implement the Boolean functions using multiplexer. Simulate the code using behavioral model

$$F(A, B, C, D) = \sum m(3, 5, 7, 8, 10, 11, 13, 15)$$