Engr354   Homework #7

DUE: Friday, October 18

Goal: Learn about circuit design and implementation using multiplexers.

To Do

- Use one 8-to-1 multiplexer to implement the function $f(A,B,C,D) = \Sigma m(1,3,5,6,7,10,12,13,15)$. Show your design steps and schematic;
- Implement the same function above with one 4-to-1 multiplexer and random logic. Show your design steps and schematic;
- Implement the same function above with one 2-to-1 multiplexer and random logic. Show your design steps and schematic;
- Using parts from your logic kit, wire up one of the three designs above and verify operation.

- **Staple this assignment sheet** to the front of your solutions, which are to be done in accordance with the school of engineering homework guidelines posted on the course web page. Include:
- Your truth tables and/or schematics;
- Describe any difficulties you had in both design and implementation;
- Bring your boards to class on the due date for a show and tell demonstration.