

## EC204 DIGITAL SYSTEM DESIGN LAB

### Lab 0 (13-09-2021)

1. Demo of features of Logisim using example of Half adder circuit and schematic capture
2. Using two half adder modules to implement a full adder
3. Using 4 Full adder modules to implement a 4 bit ripple carry adder
4. Demo of how to do design entry using truth table/logic expression and combinational synthesis
5. Draw NAND-NAND for  $F = WX'Y' + XY'Z + XY$
6. Draw NOR – NOR for  $G = \prod_{A,B,C}(1, 2, 6, 7)$