
Faculty of Engineering & Technology

Electrical & Computer Engineering Department

# ENCS 3330

# Assignment 2

**Prepared by:**

**Rasha Daoud – 1210382**

**Instructor:**

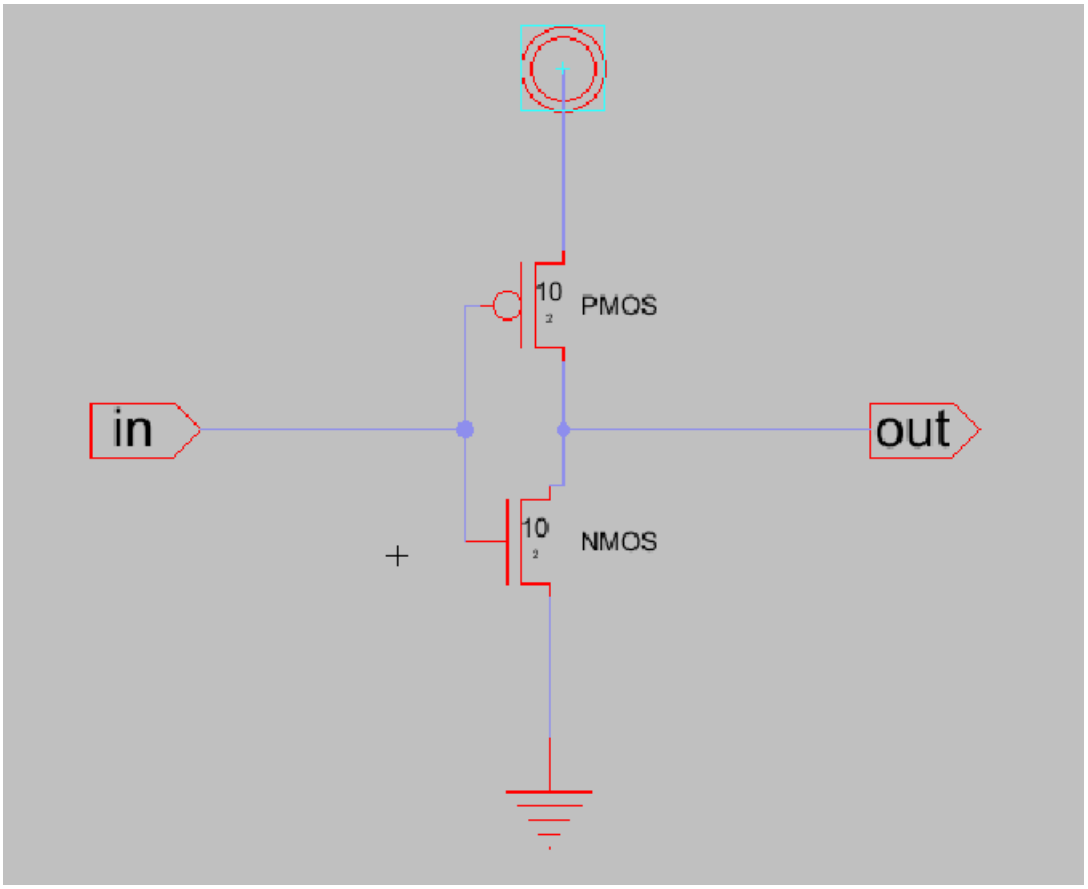
**Dr. Khader Mohammed**

**Section: 2**

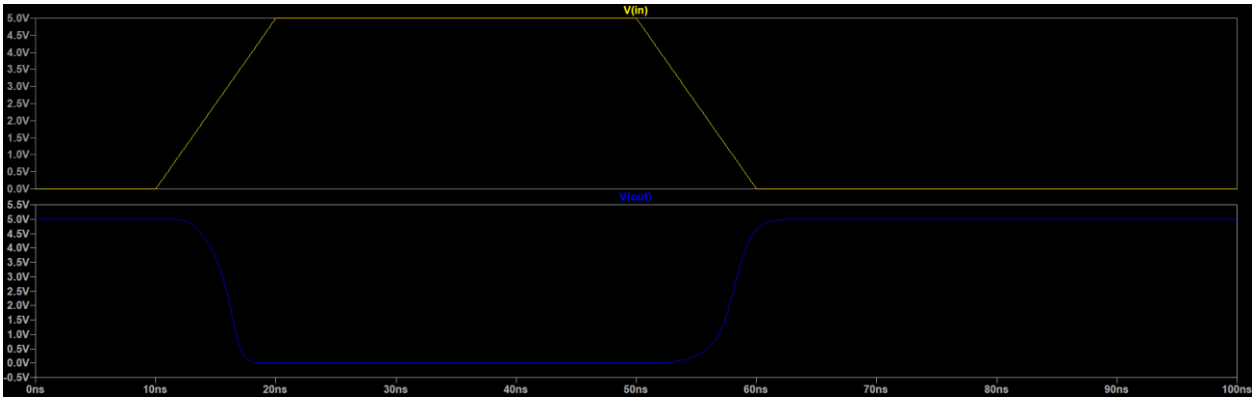
**Date: 10 Nov. 2023**

**Invertor:**

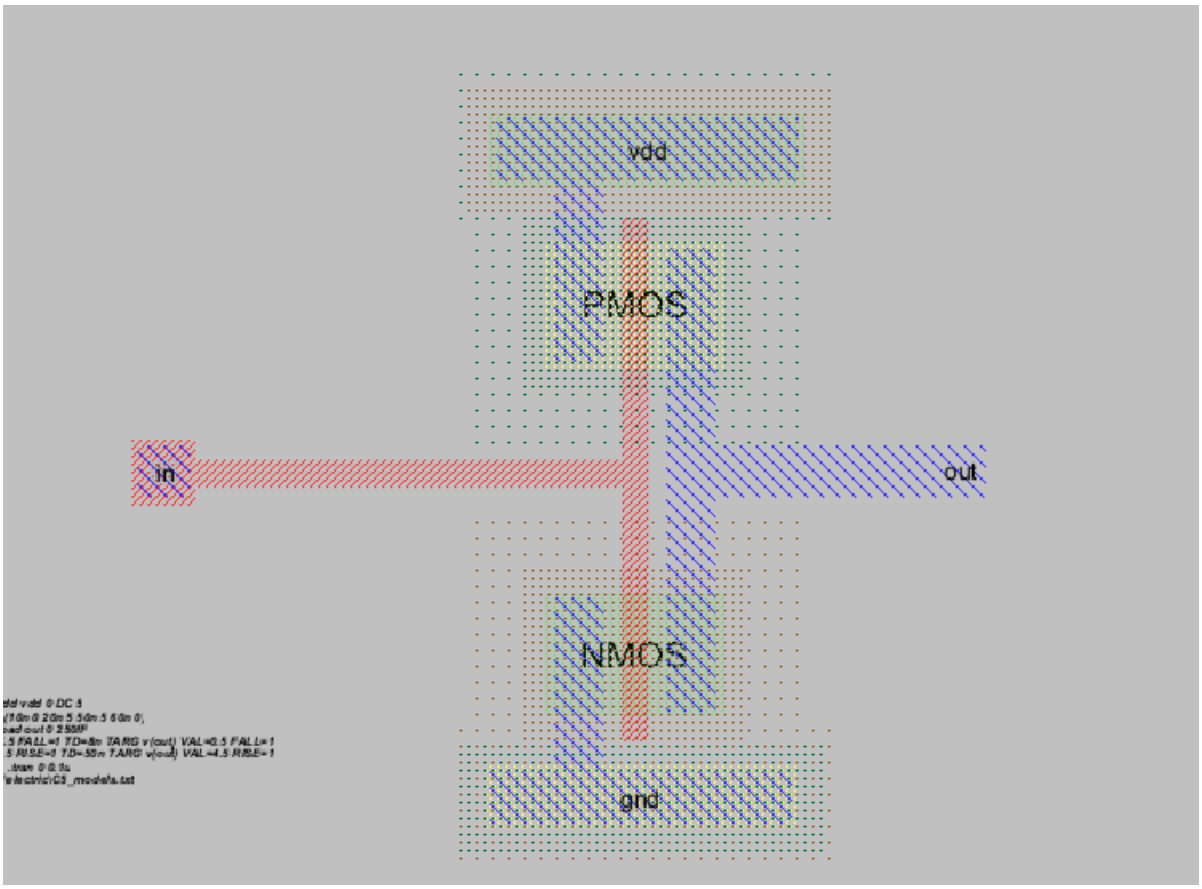
Schematic:



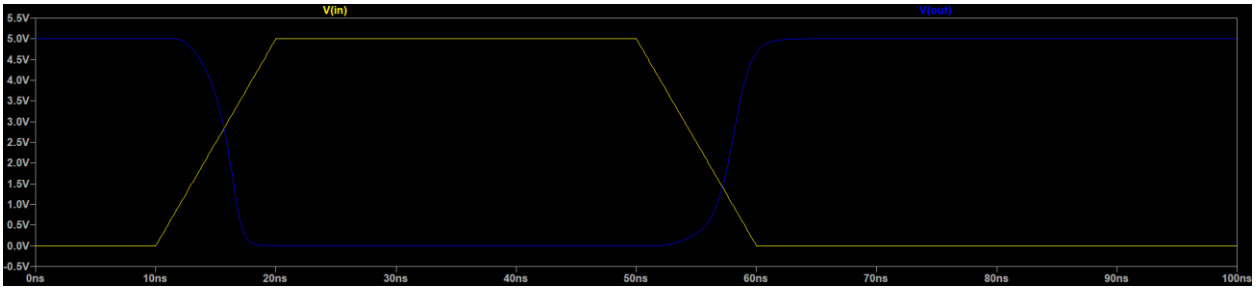

Schematic simulation:



Layout:

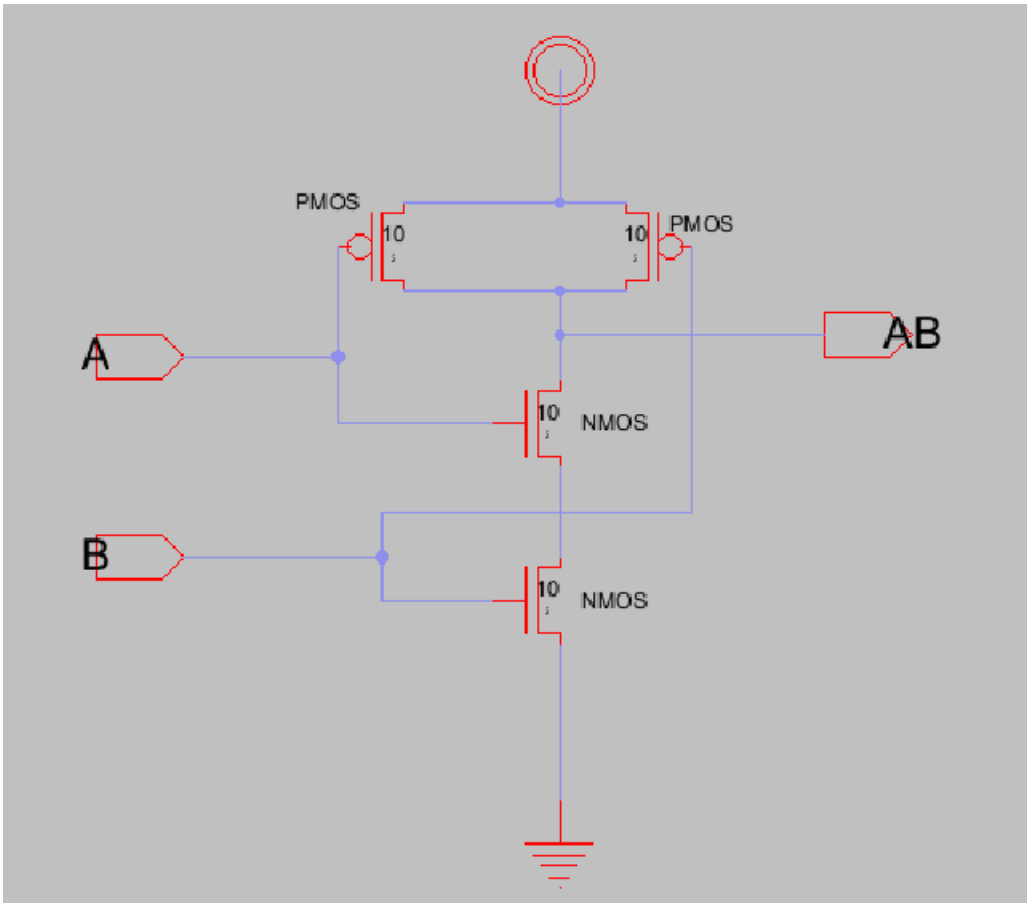



Layout Simulation:



**NAND:**

Schematic:

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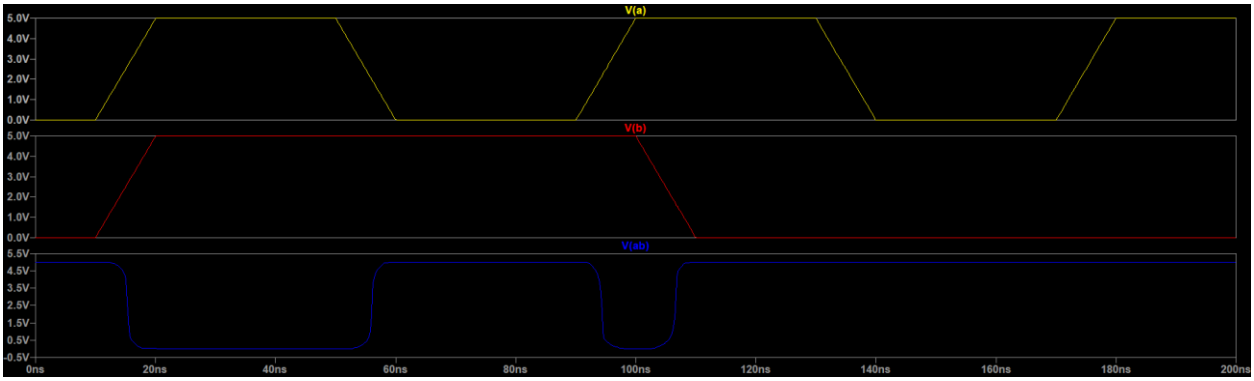
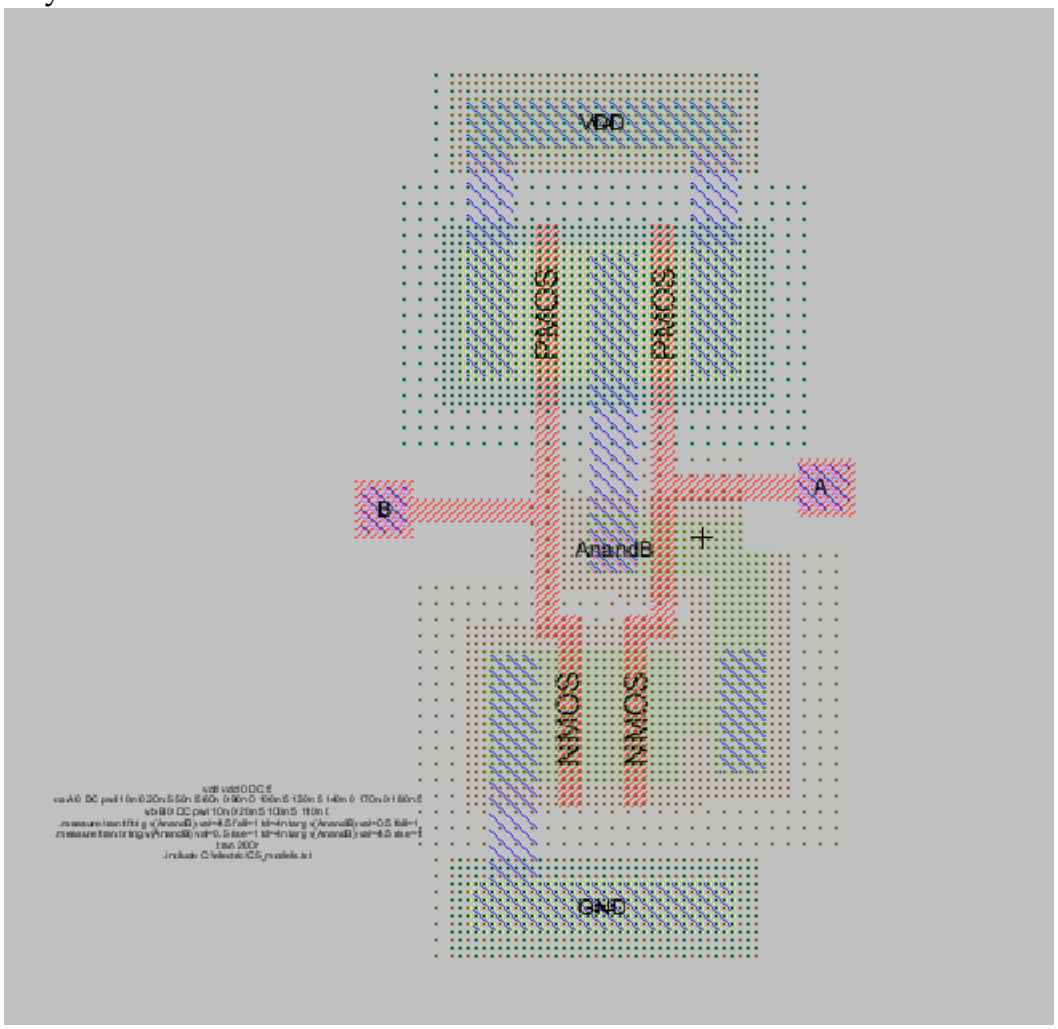
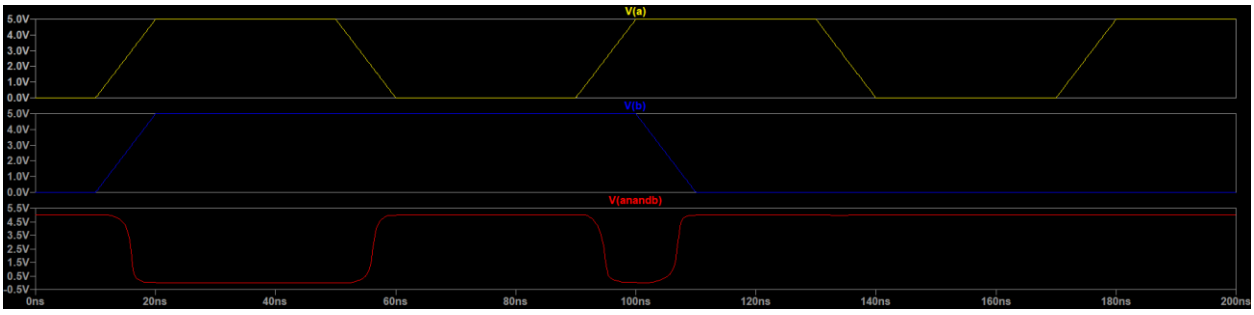


Layout:

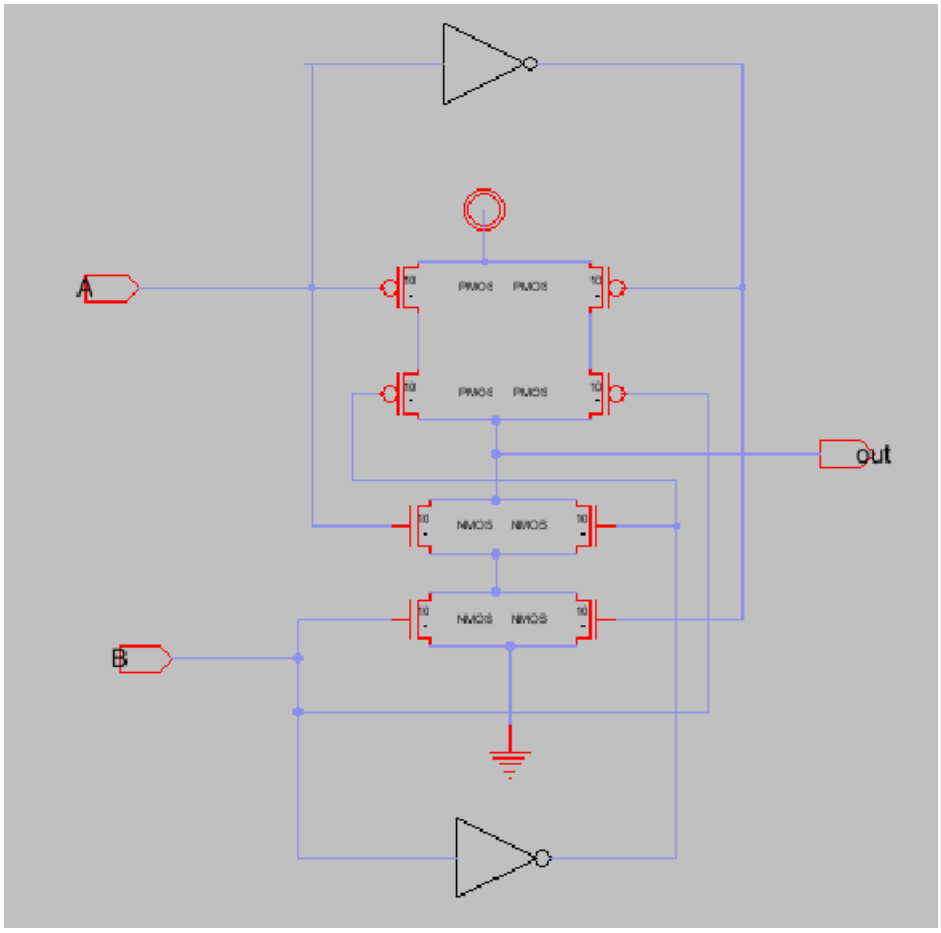



Simulation for Layout:

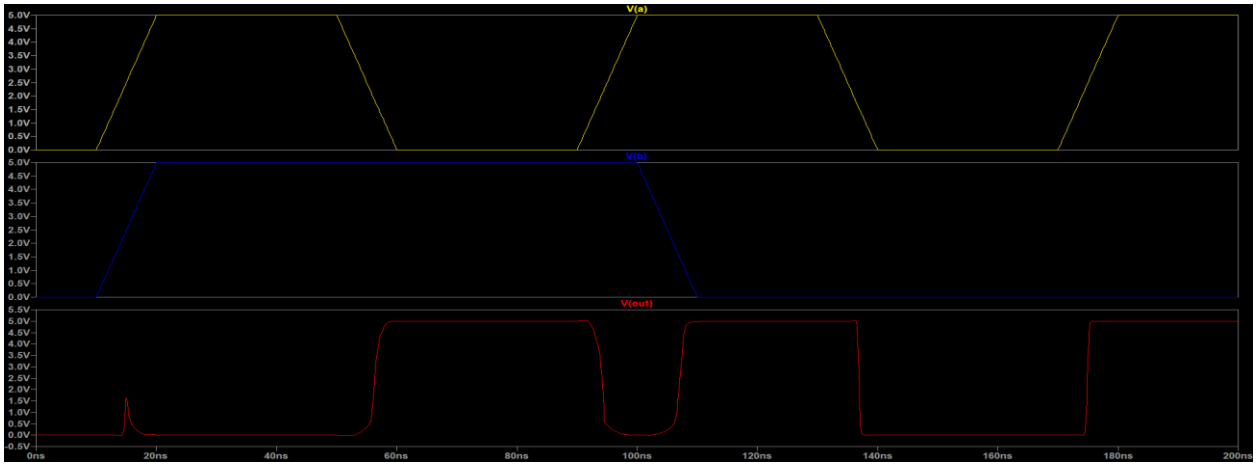


**XOR:**

Schematic:




Simulation of schematic:



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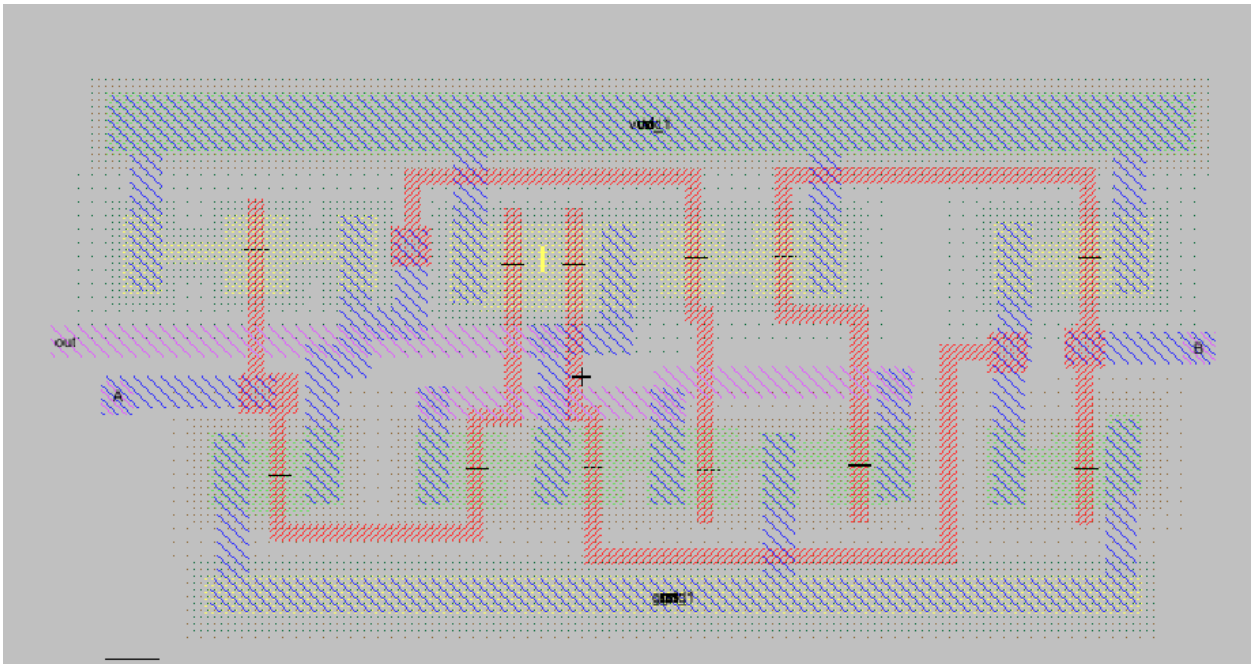
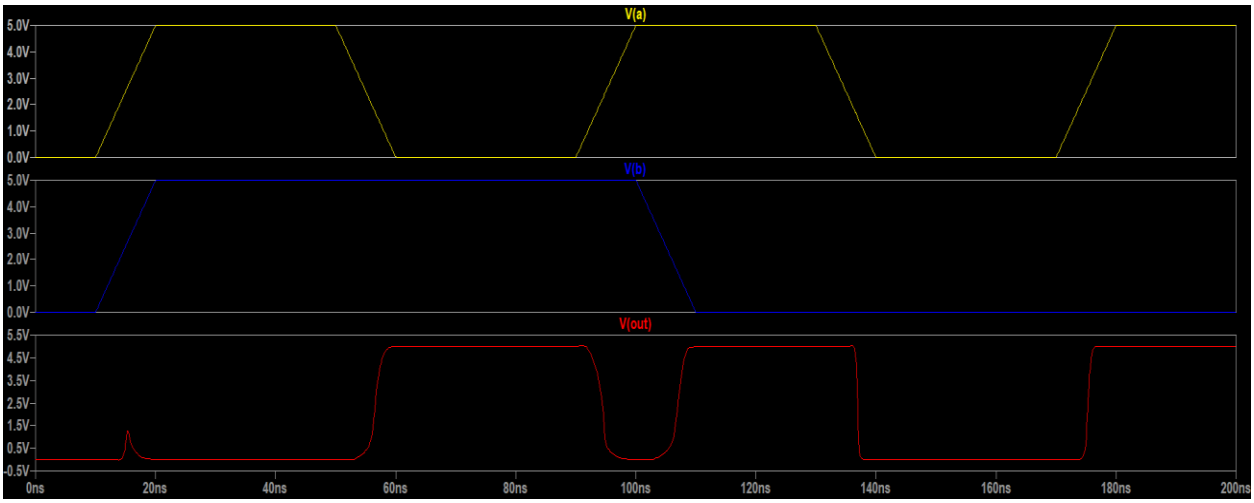
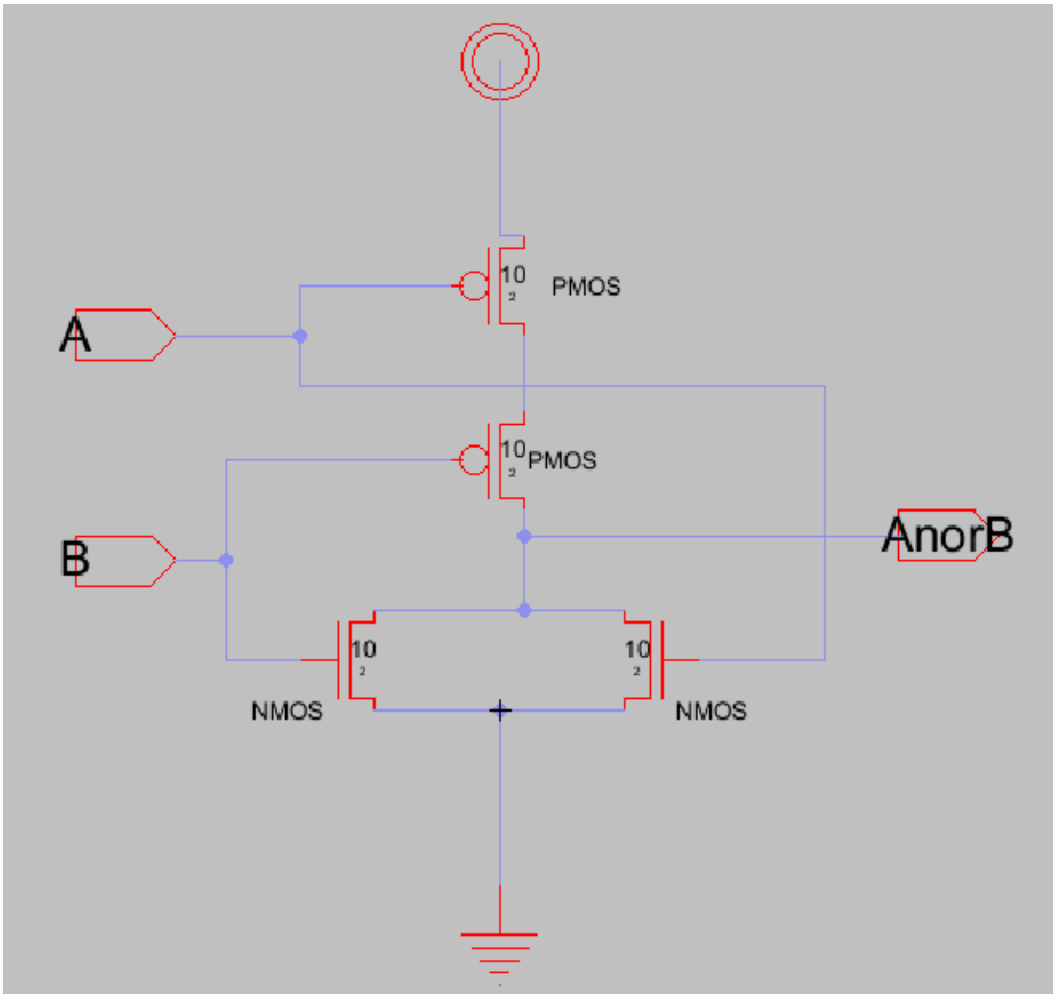



Simulation of Layout:

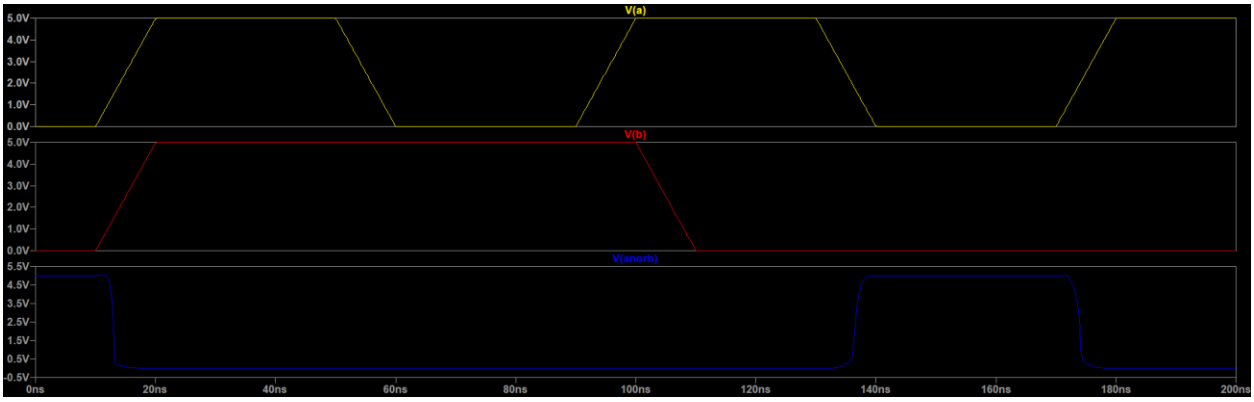


**NOR:**

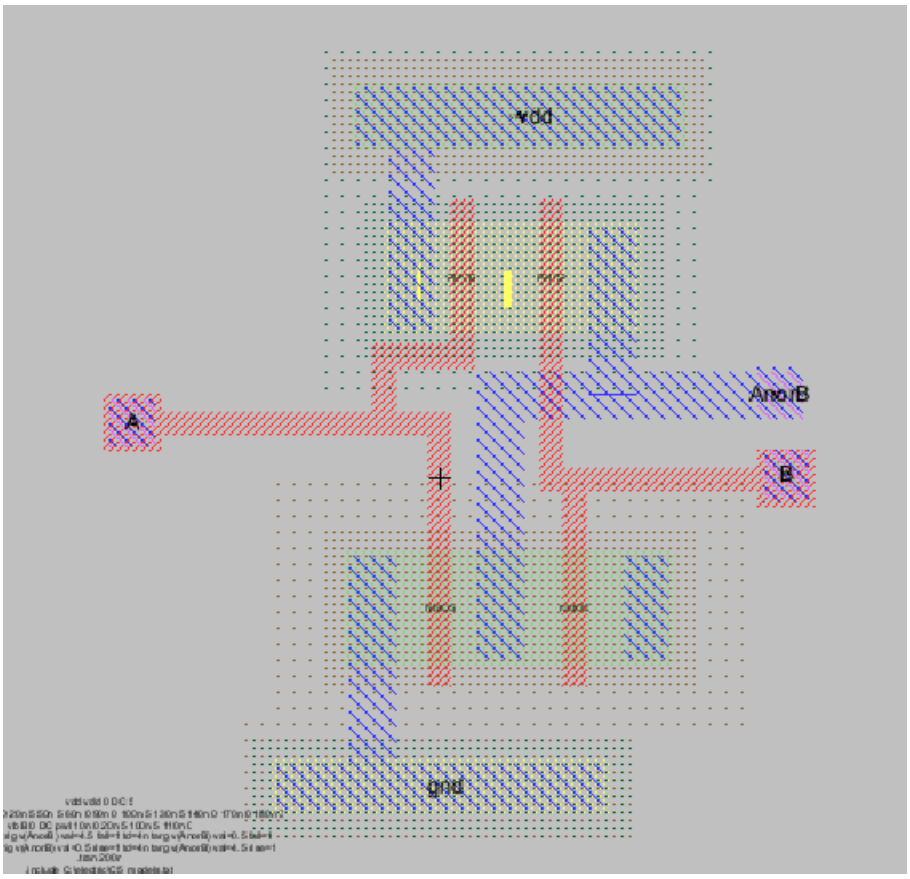
Schematic:



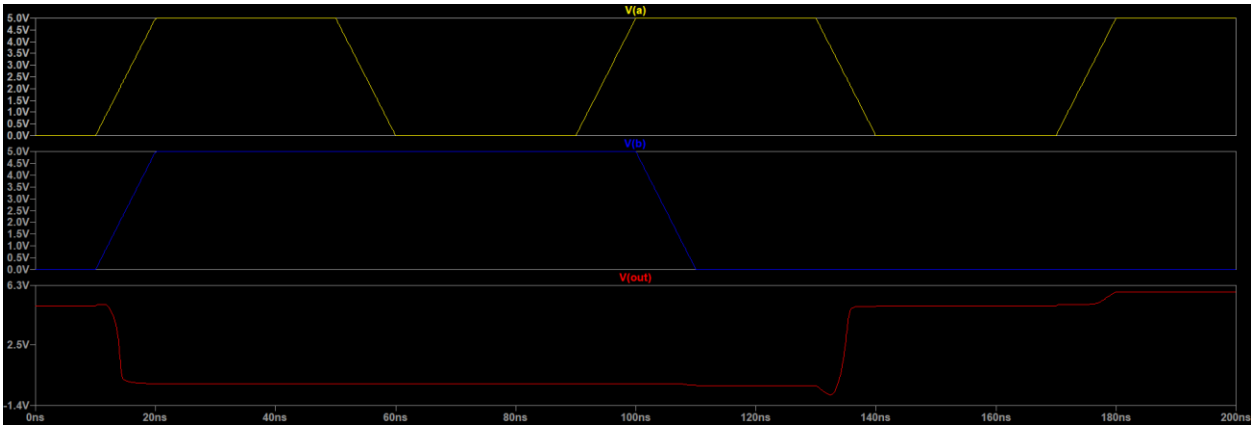

Simulation of the Schematic:



Layout:

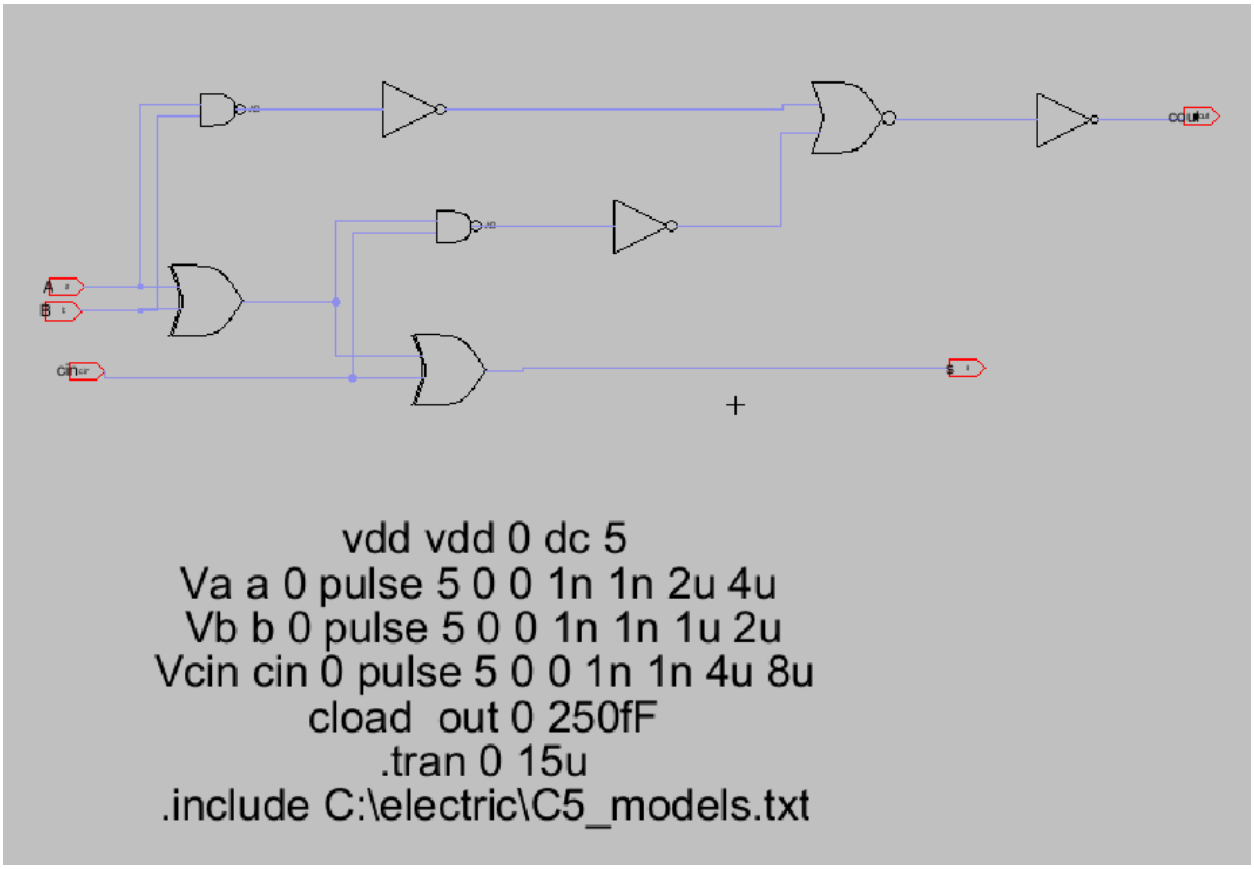



Simulation of Layout:

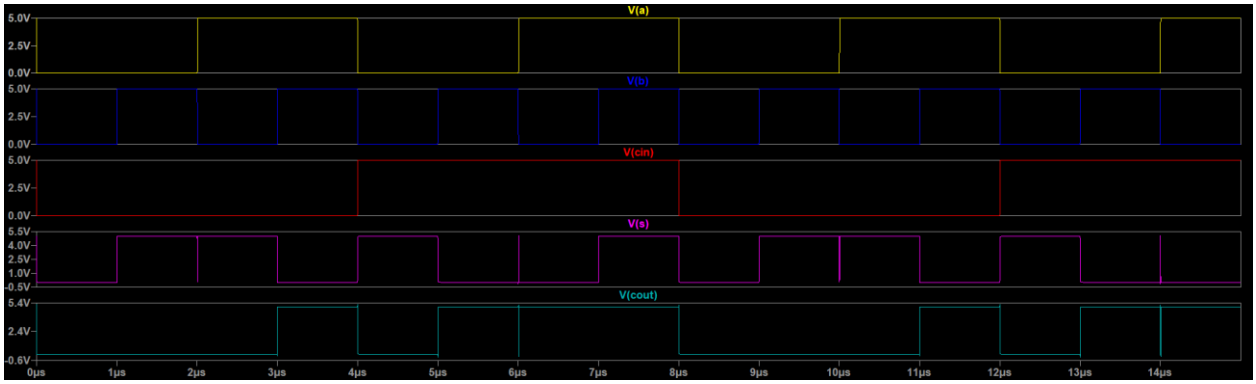


**Full Adder:**

Schematic:




Schematic Simulation:



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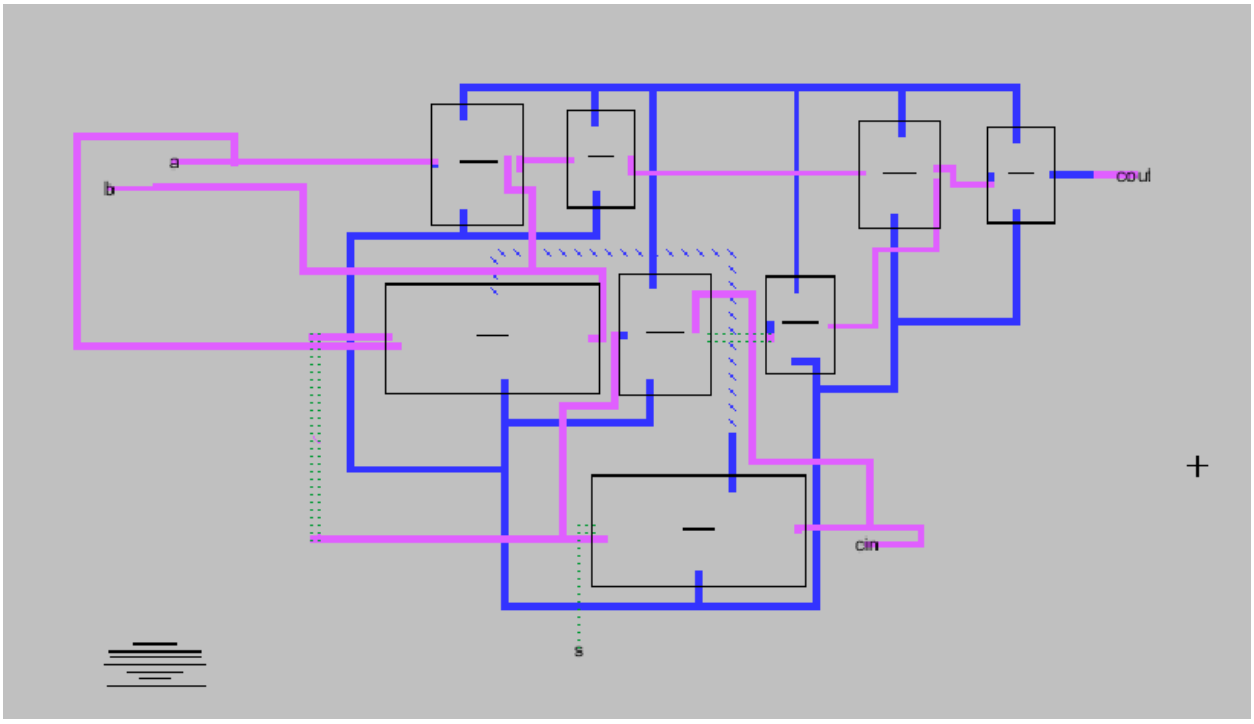


Layout Simulation: