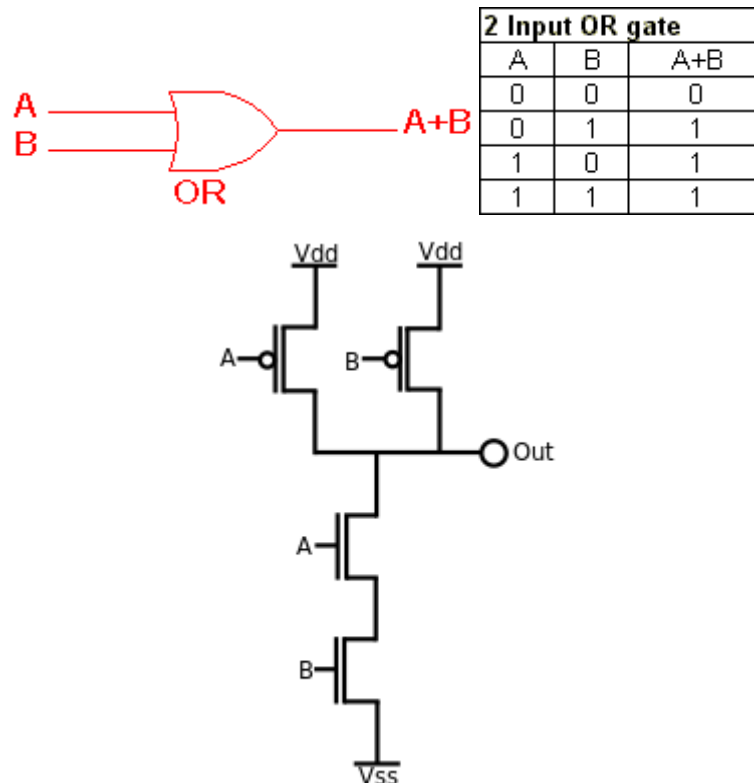


## Experiment 4

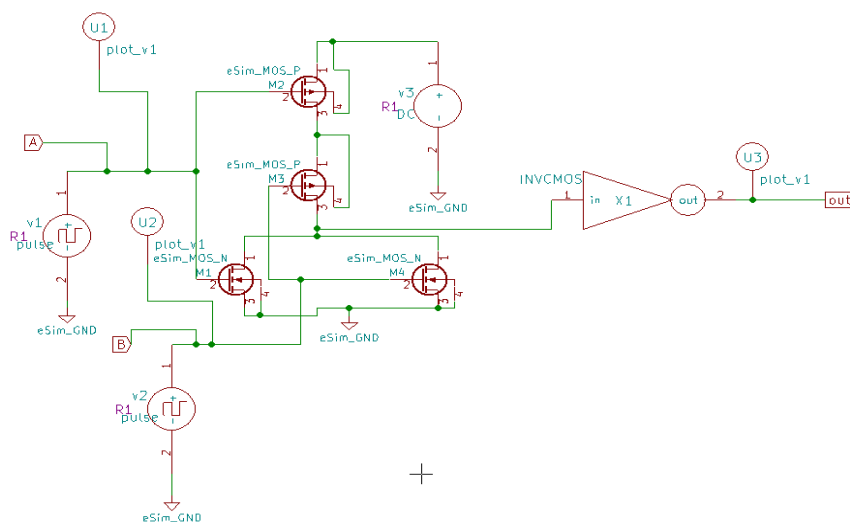
**Aim:** To verify truth table of OR gate

### Theory:

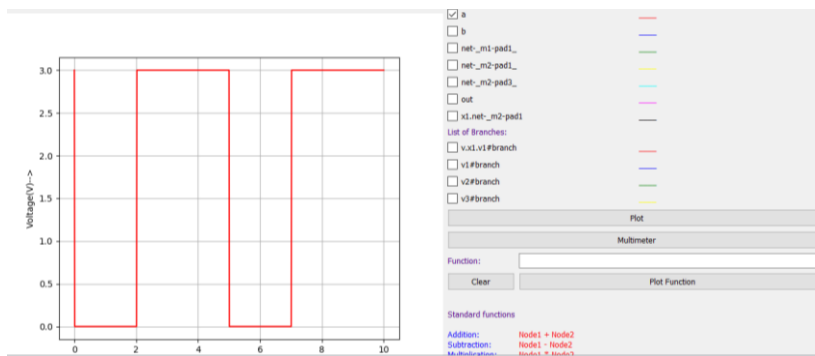
The OR gate is an electronic circuit that gives a high output (1) if one or more of its inputs are high. A plus (+) is used to show the OR operation.



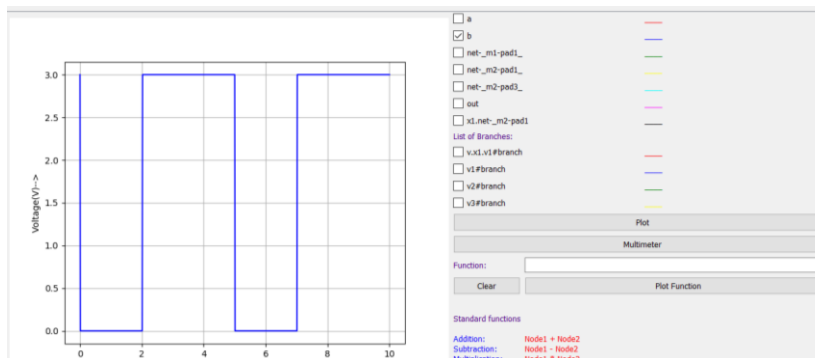
### Circuit Diagram:



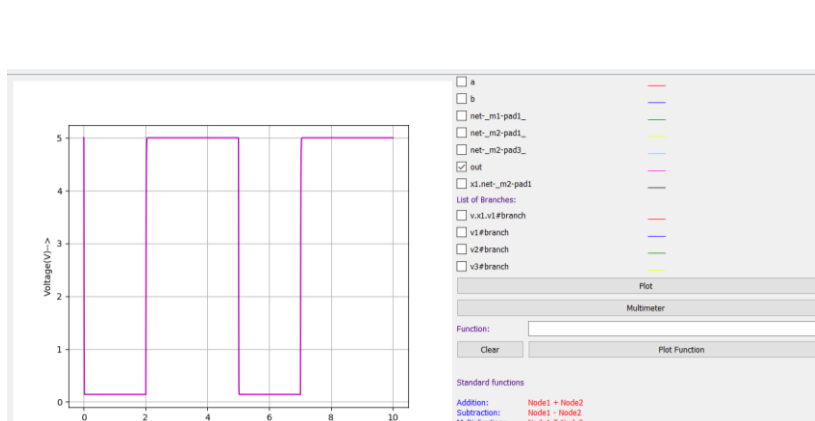
## Python Plot of Input A:



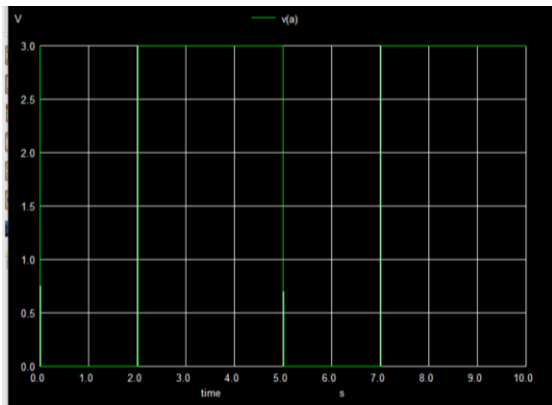
## Python Plot of Input B:



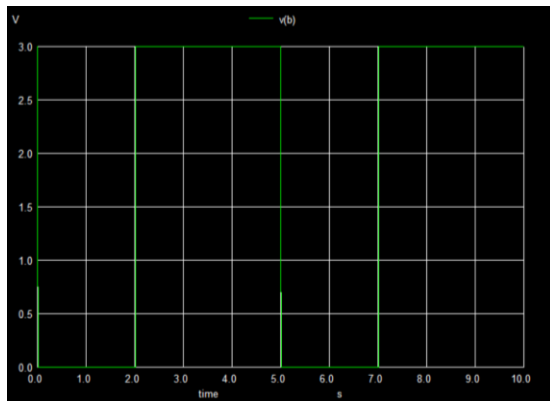
## Python Plot of Output:



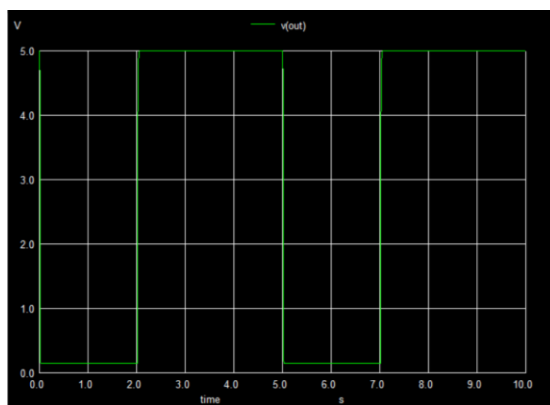
NGSPICE Plot of Input A:



NGSPICE Plot of Input B:



NGSPICE Plot of output:



Source/Reference(s) :

- 1) CMOS VLSI Design A circuit and systems perspective by Neil H.E.Weste, David M.Harris. fourth edition.
- 2) <https://en.wikipedia.org/wiki/CMOS>