

Scilab Manual for  
Digital VLSI Lab with top to bottom approach  
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# **Experiment: 1**

## **Design of NAND gate using CMOS technology**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

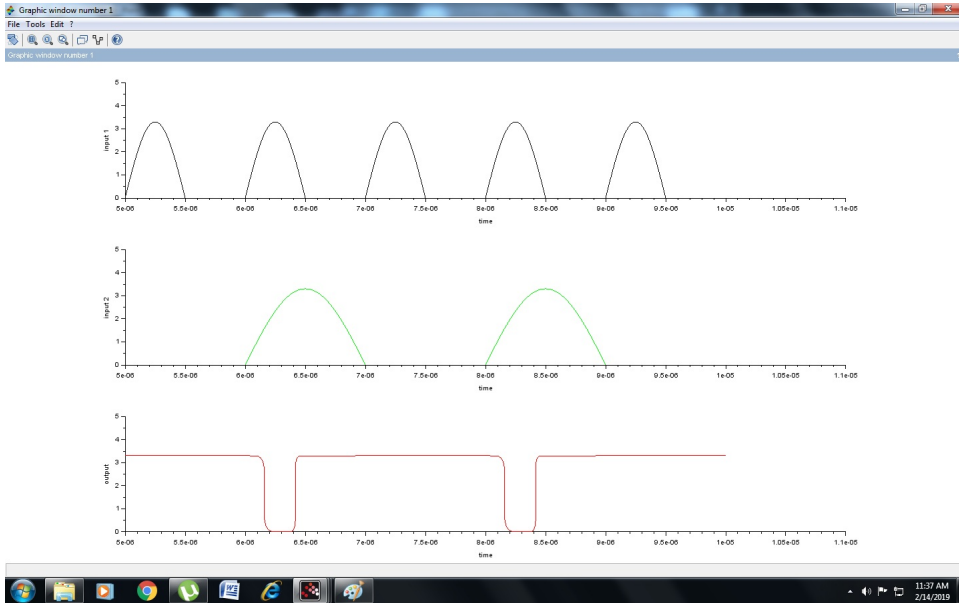


Figure 1.1: NAND Gate

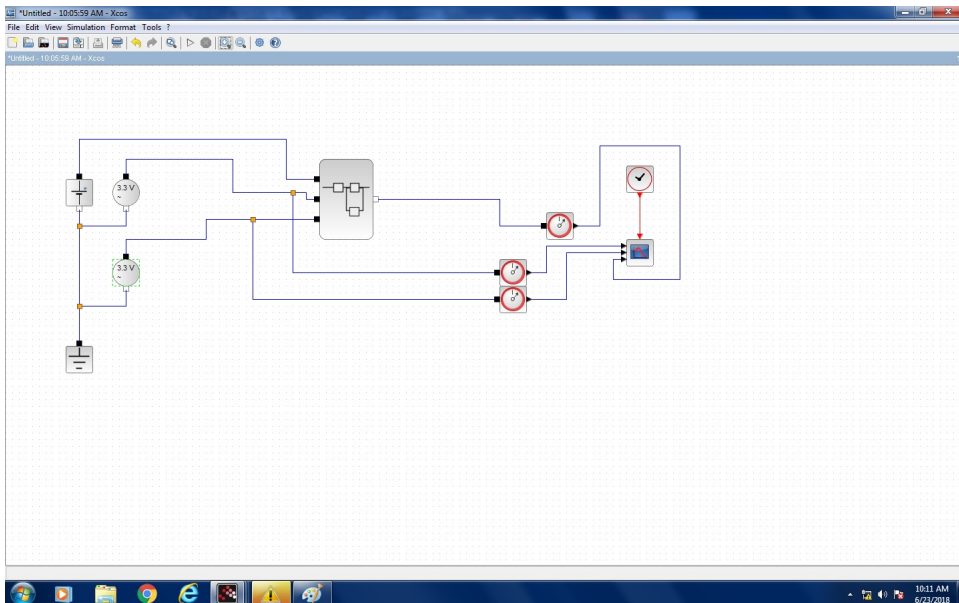


Figure 1.2: NAND Gate

## **Experiment: 2**

# **Design of NOR gate using CMOS technology**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

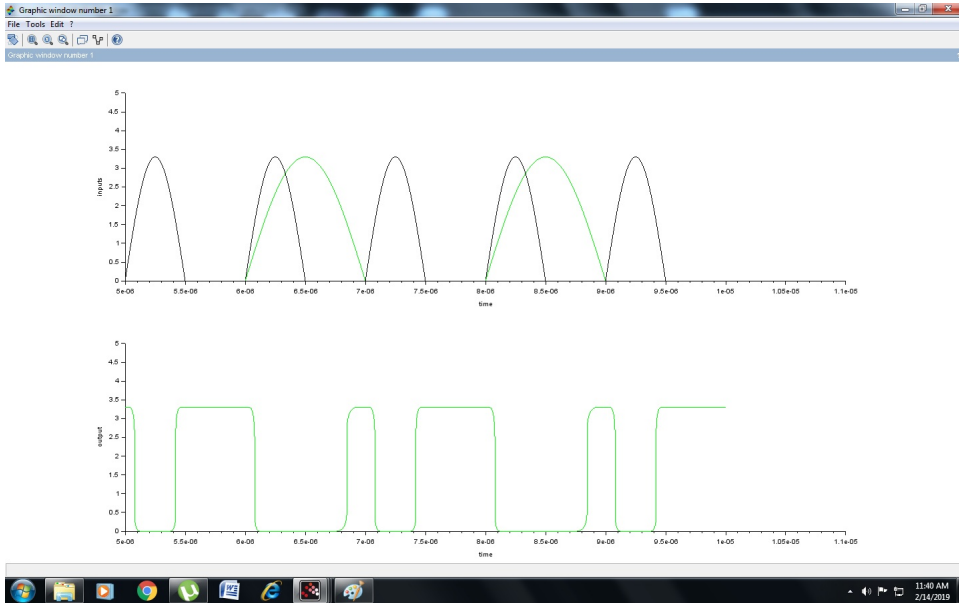


Figure 2.1: NOR Gate

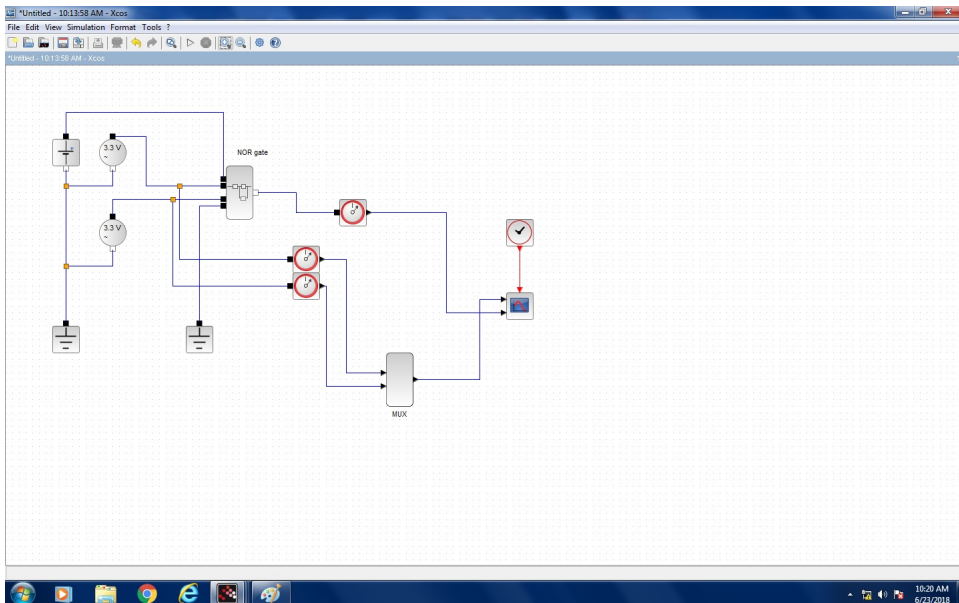


Figure 2.2: NOR Gate

## **Experiment: 3**

# **Design of 4:1 multiplexer IC**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

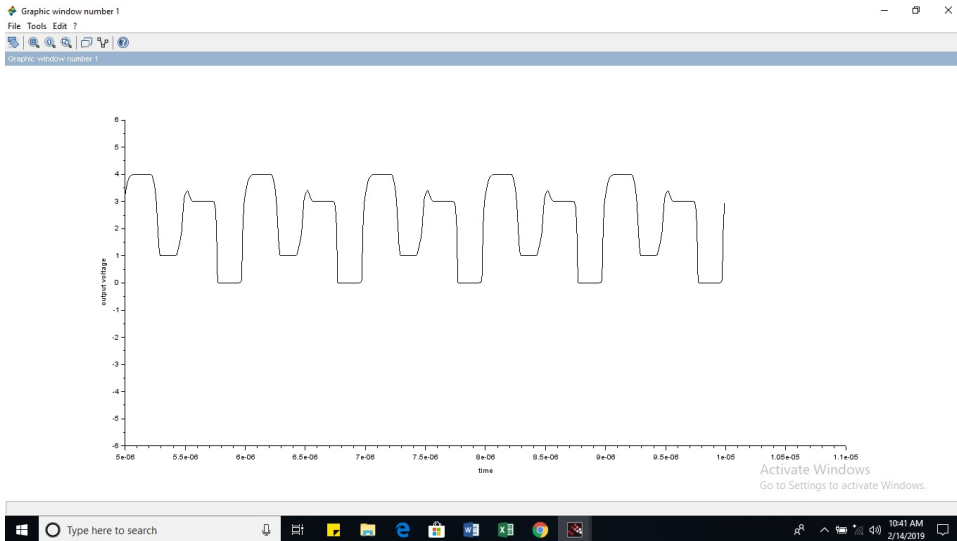


Figure 3.1: Mux4

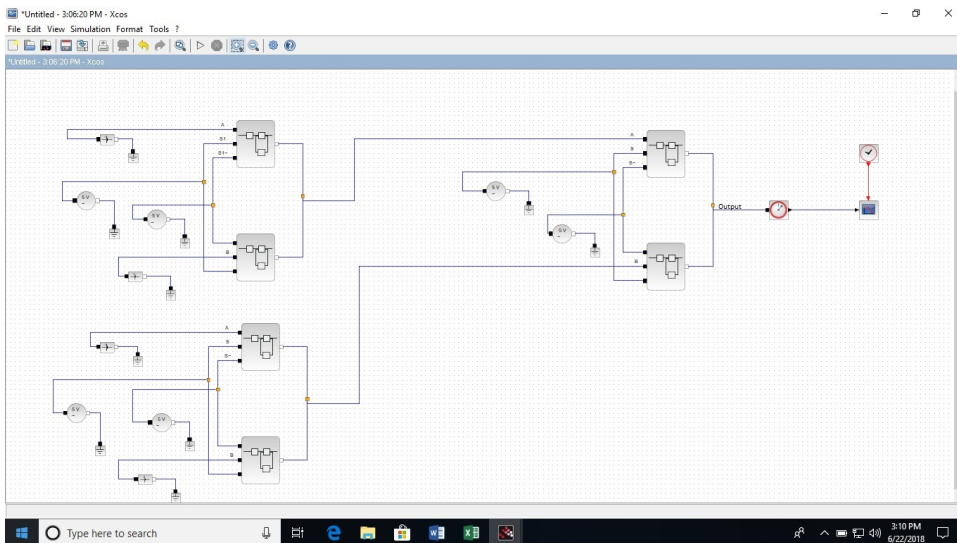


Figure 3.2: Mux4

## **Experiment: 4**

### **Design of 8:1 multiplexer IC using 4:1 mux tree**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

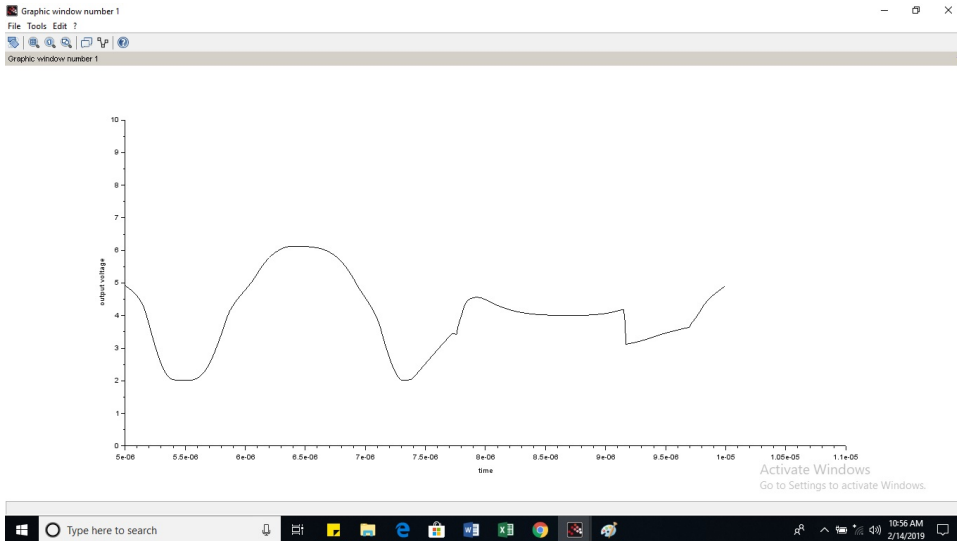


Figure 4.1: multiplexer

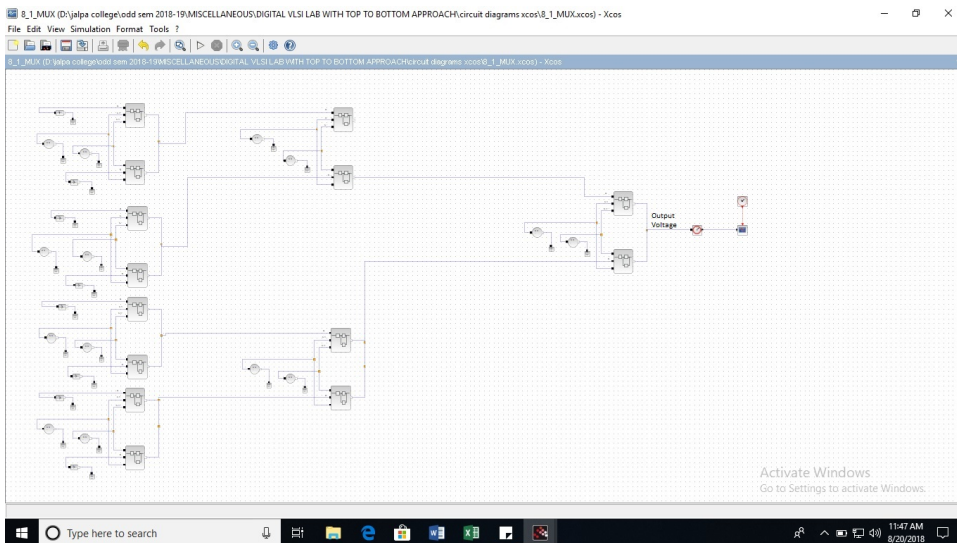


Figure 4.2: multiplexer

## **Experiment: 5**

# **Design of 1:8 demultiplexer IC**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

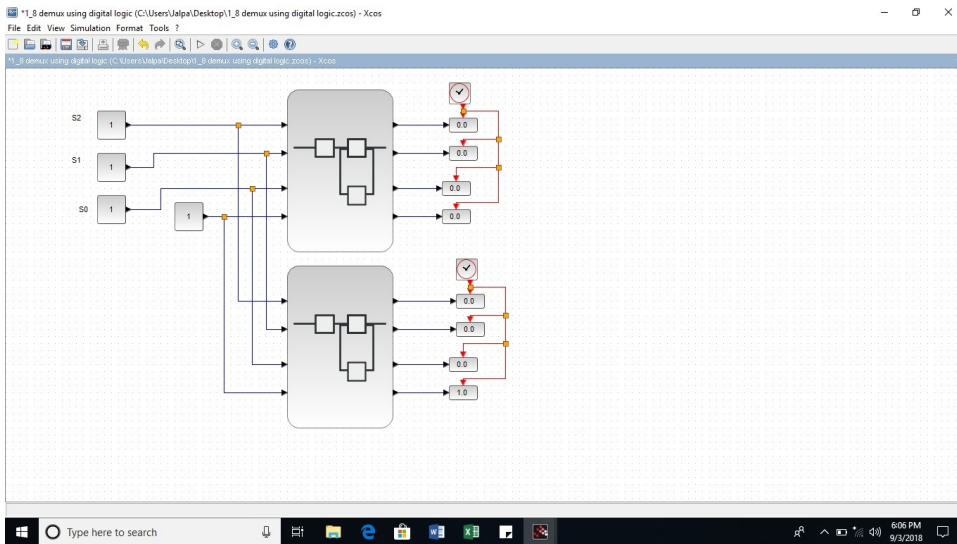


Figure 5.1: demux