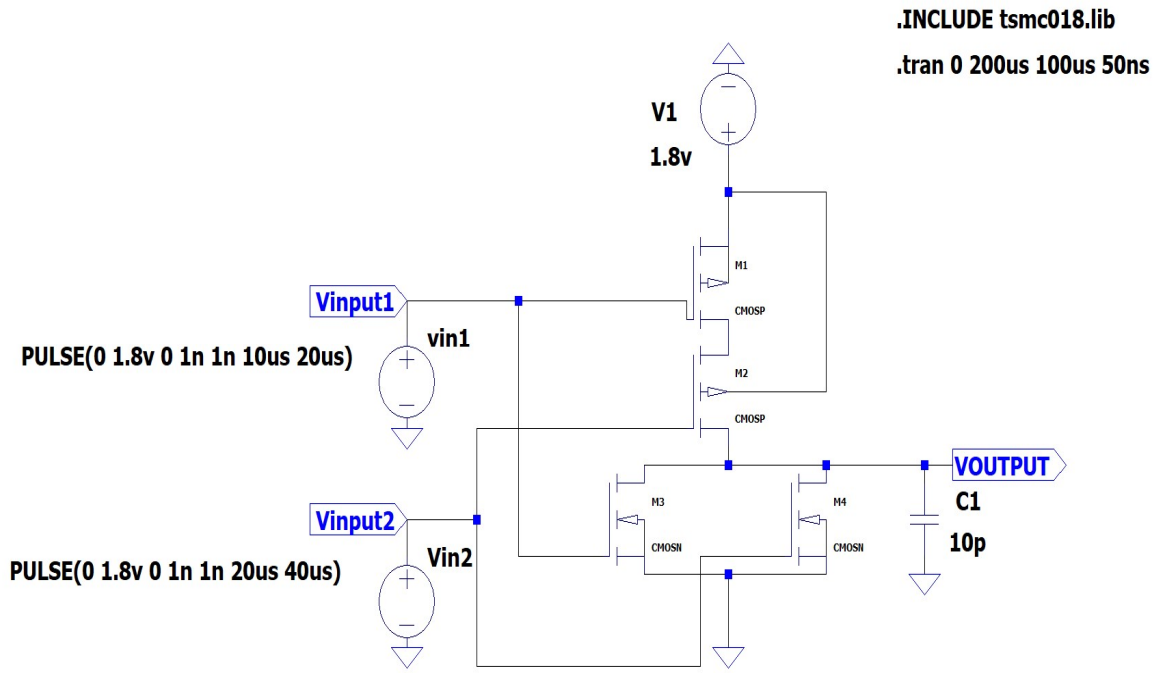
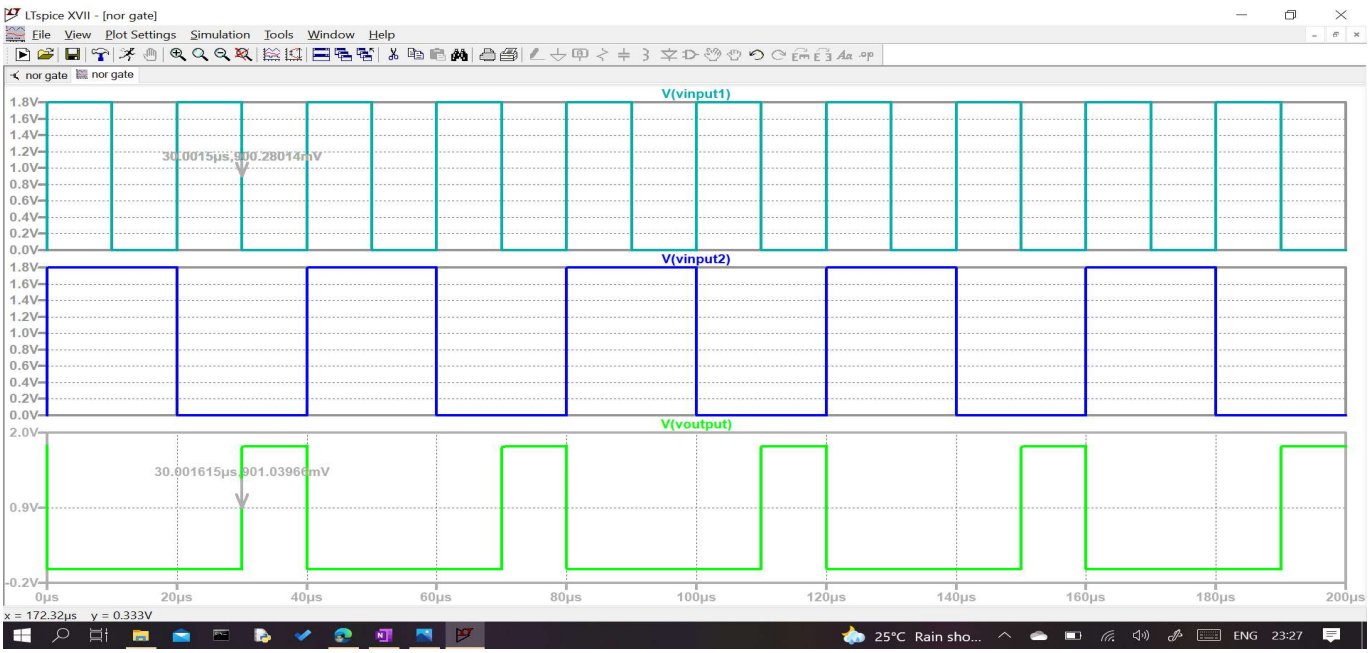


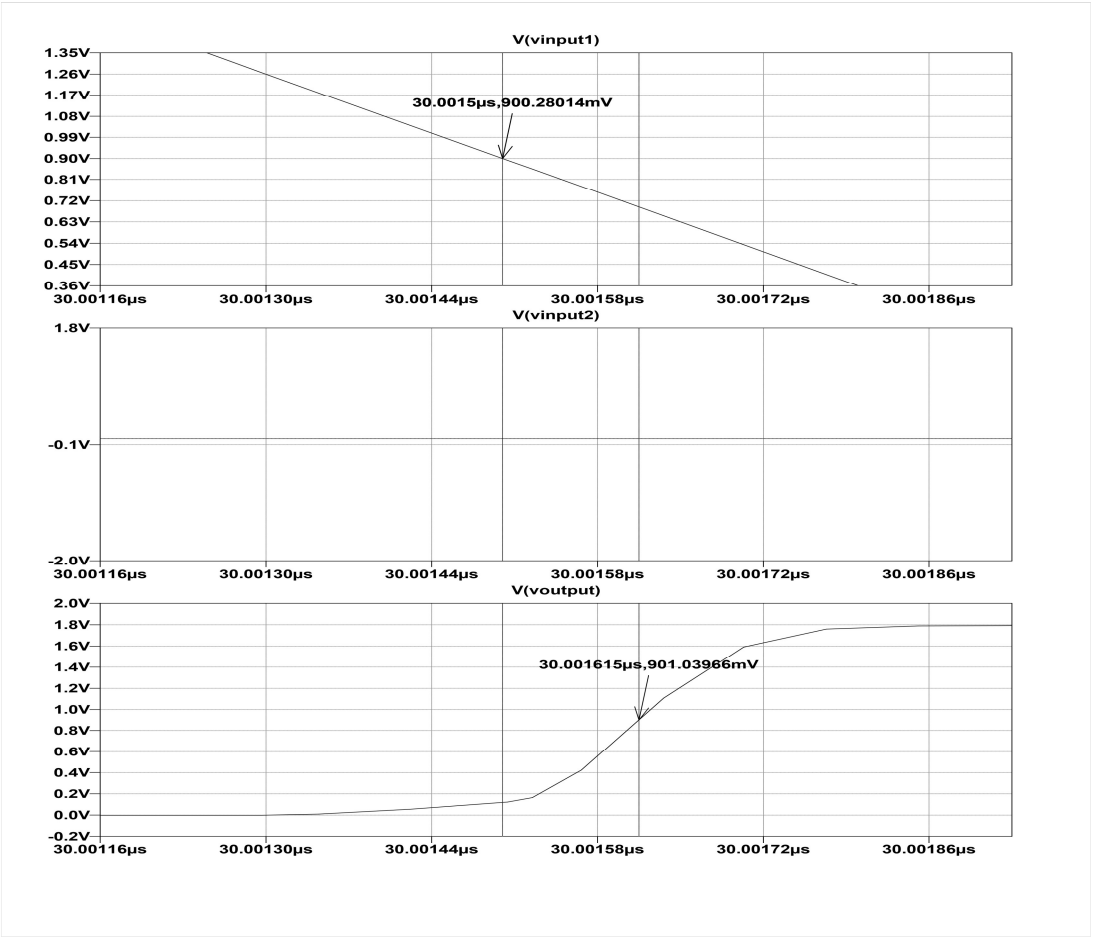
Assumptions Taken : 180nm Technology

L=180nm, W=400nm(N-mos), W=800nm (P-mos)

Input :Pulse Type & details are as Mentioned in the Diagram.

BELOW ARE THE SWITCHING SIMULATIONS FOR CHANGING INPUT LOGIC :

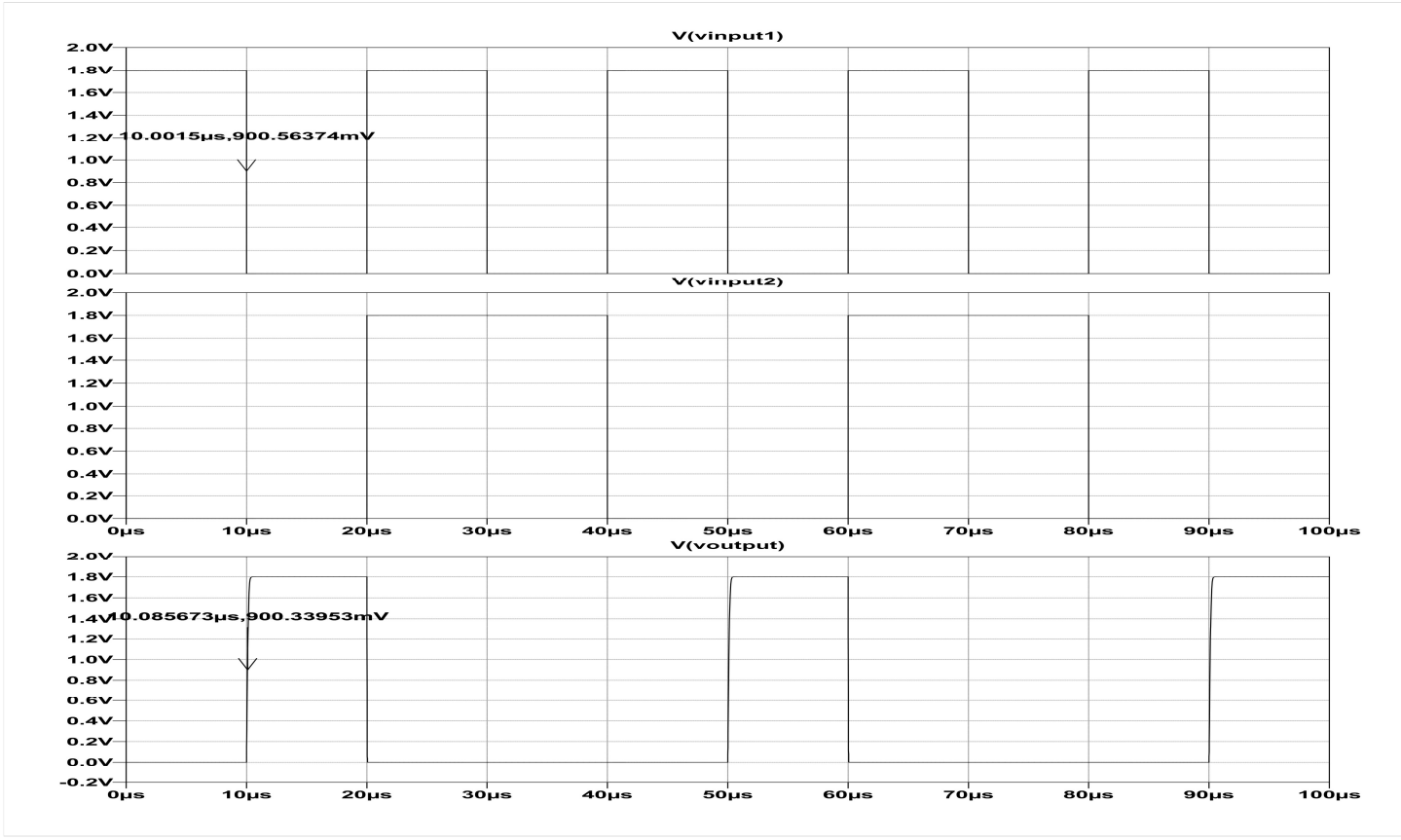


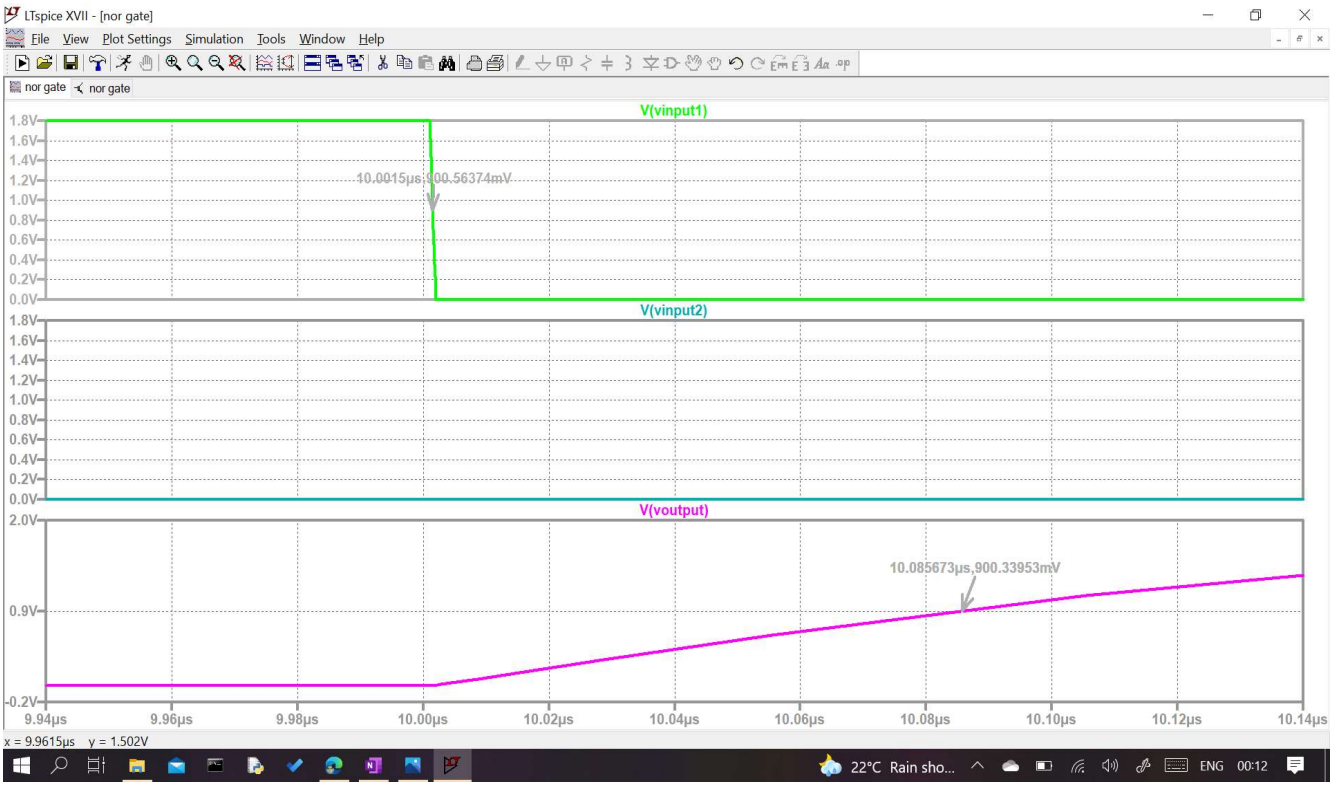


Here Two Values are marked Which we can clearly see are marked at input crossing 50% of the value and the output crossing 50% of the value.

CALCULATIONS: Tdelay = 30.001615us-30.0015us = 115 Pico seconds

With C load : Below Graphs Shows that the delay has increased by adding 10Pf Load at the output terminal.





These values are marked at Input Crossing of 50percent & the output crossing of 50 percent.

Calculations:

Tdelay = 10.08567us-10.0015us = 84170 Pico seconds

Without C load : 115 Pico seconds

With C load : 84170 Pico seconds

Input 1	Input 2	Output	Delay Without Load	Delay With Load
Low (0)	Low(0)	High(1)	115 ps	84710 ps