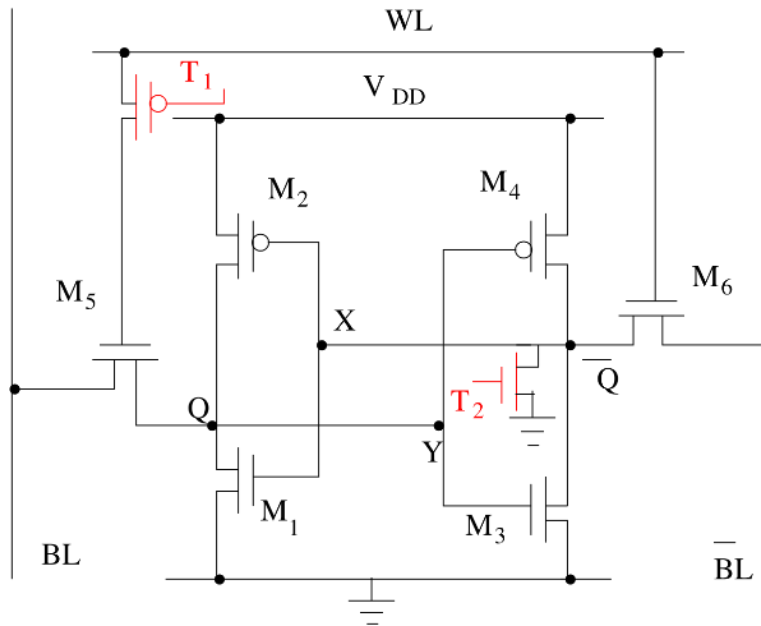


SHANTONU DEBNATH
Dept. of CST, IEST, Shibpur



➤ Different Answer for the change of W/L.

Table

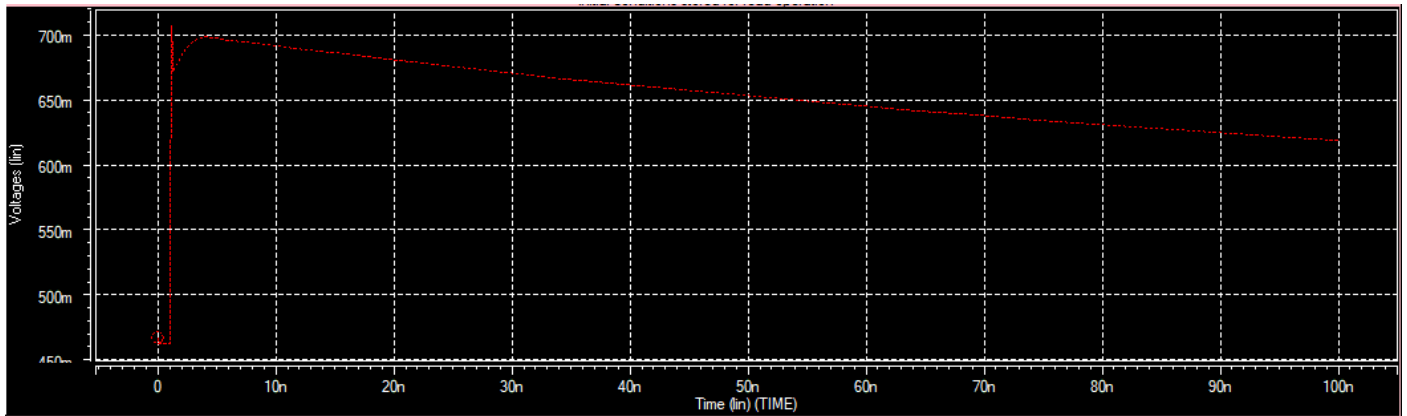
- Here I added only finishing time.
- In normally we find the voltage V_1 , V_{bl} , V_{blb} , V_{i5} , V_q , V_{qr} , V_t , V_{wl} .
- After change the W/L V_1 , V_{bl} , V_{i5} , V_q , V_{qr} , V_t change their timing.

Voltage	W/L=1	W/L=2	W/L=3	W/L=4	W/L=5	W/L=6
V1	3.89 ns	5.59 ns	5.59 ns	5.08 ns	5.30 ns	4.07 ns
Vbl	4.39 ns	1.72 ns	1.73 ns	1.17 ns	1.17 ns	1.17 ns
Vi5	4 ns	1.68 ns	2.28 ns	1.85 ns	1.64 ns	1.79 ns
Vq	1.37 ns	1.18 ns	1.17 ns	1.17 ns	1.17 ns	1.17 ns
Vqr	15.0 ns	24.5 ns	56.0 ns	38.5 ns	31.7 ns	2.05 ns
Vt	3.31 ns	1.17 ns	1.16 ns	1.17 ns	1.17 ns	1.17 ns

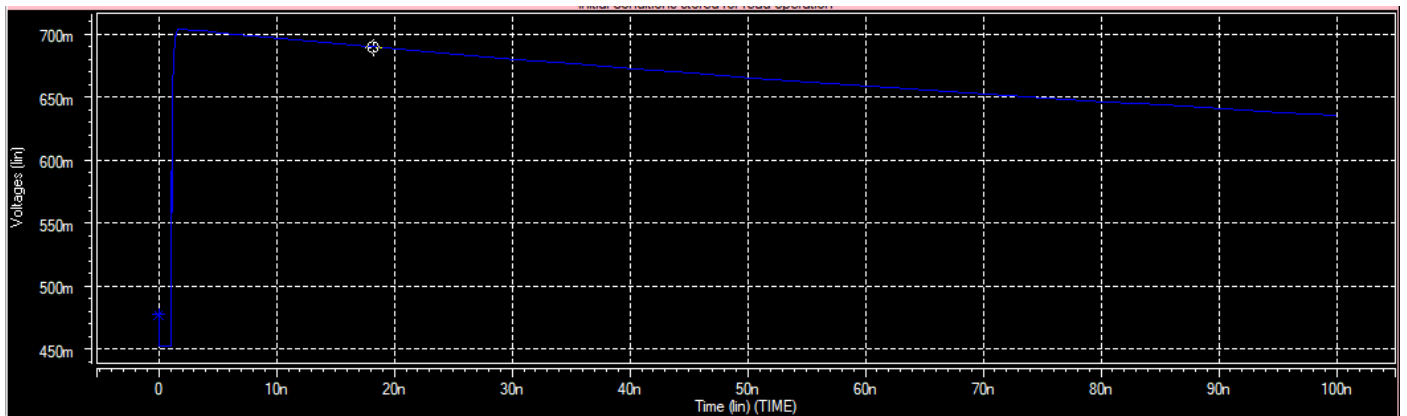
Graph

Voltage V1:

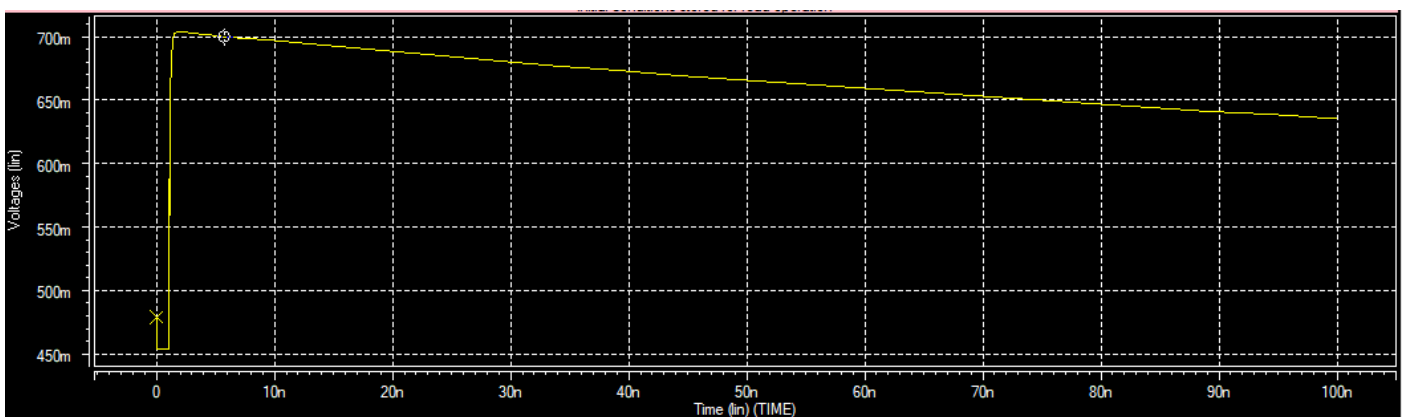
1. For $W/L=1$



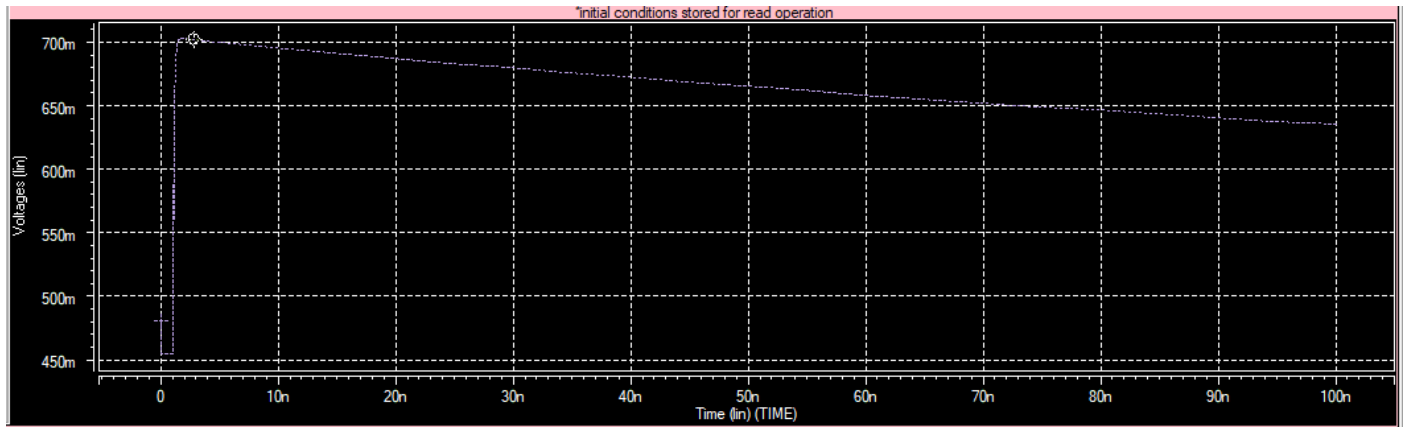
2. For $W/L=2$



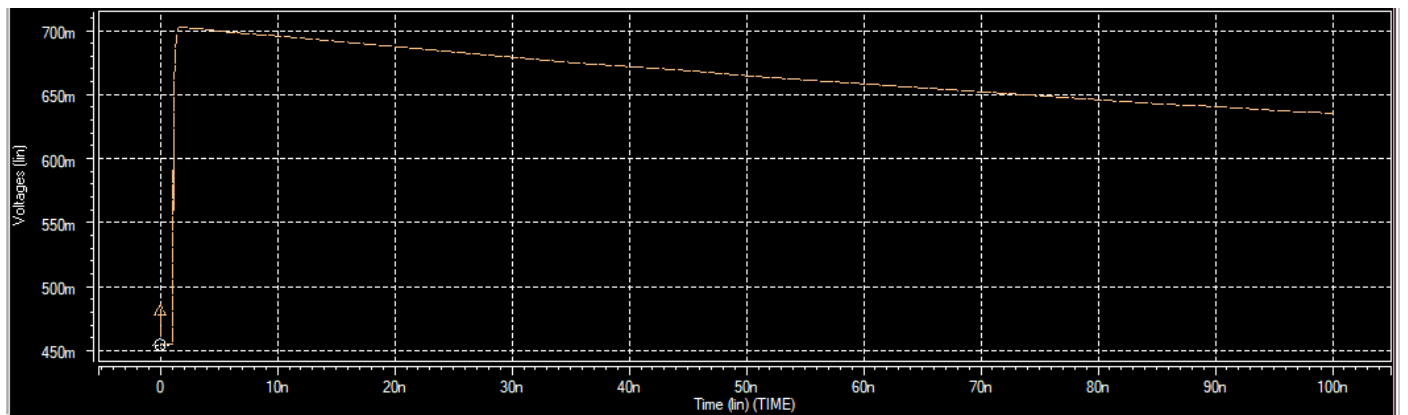
3. For $W/L=3$



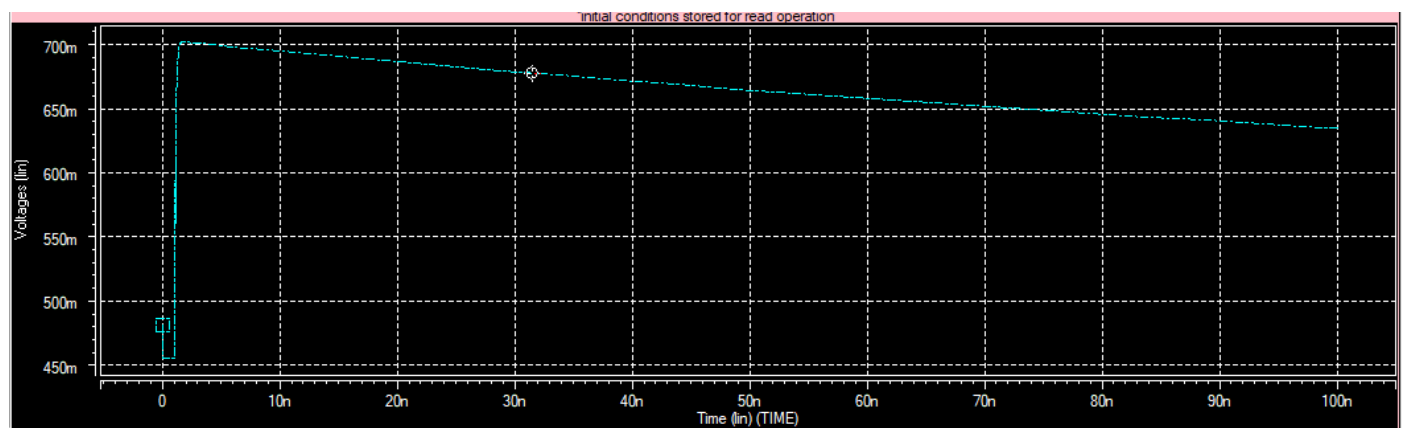
4. For $W/L=4$



5. For $W/L=5$

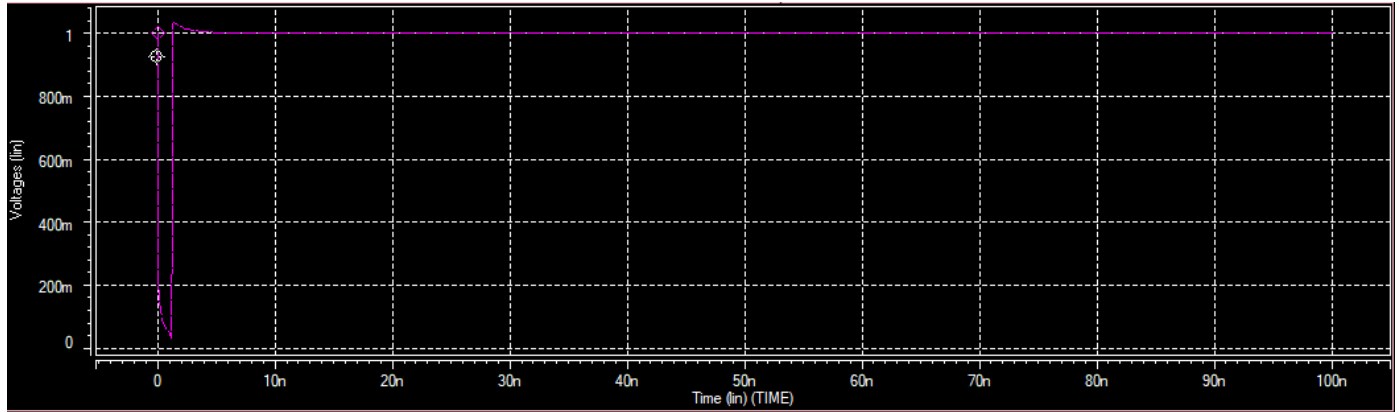


6. For $W/L=6$

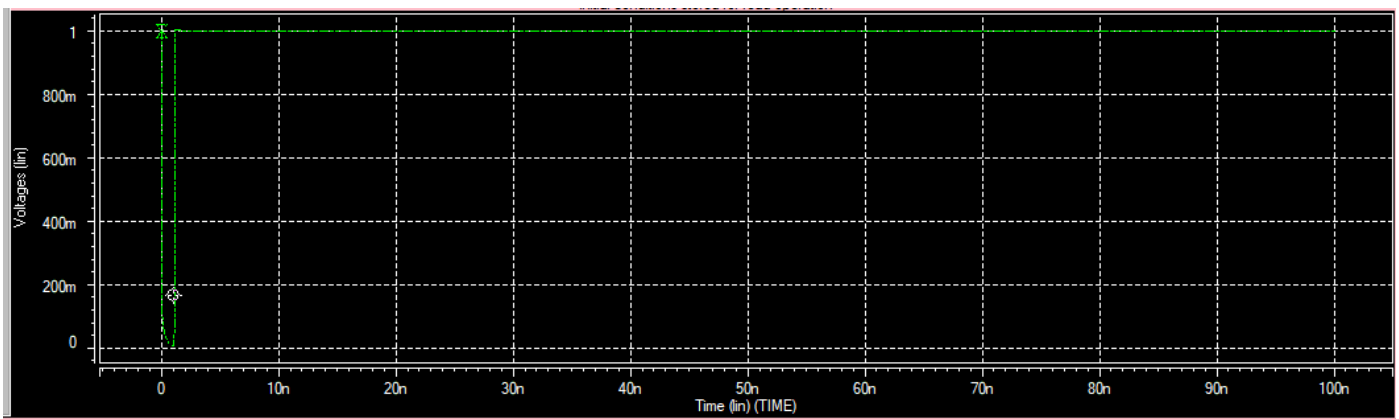


Voltage Vbl:

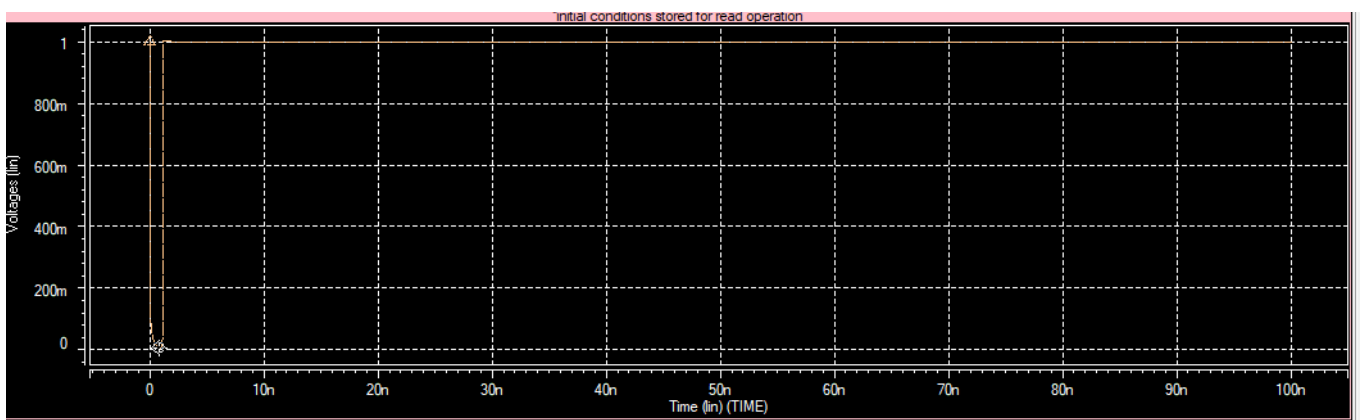
1. For $W/L=1$



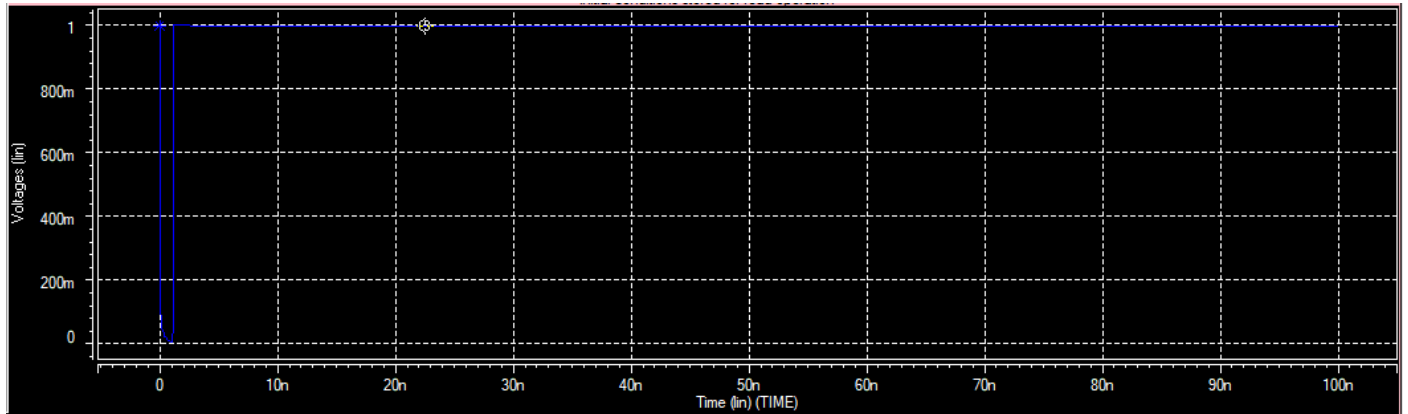
2. For $W/L=2$



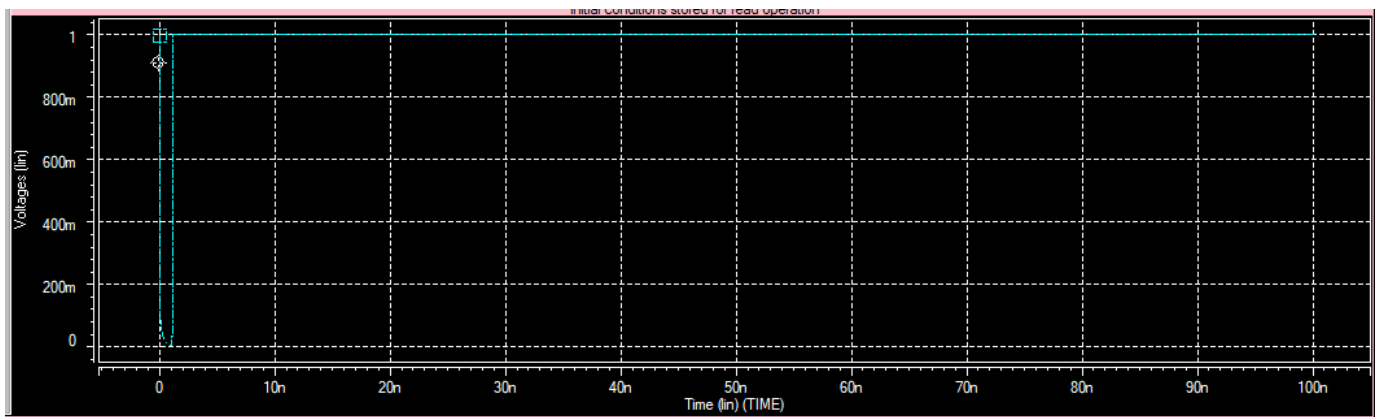
3. For $W/L=3$



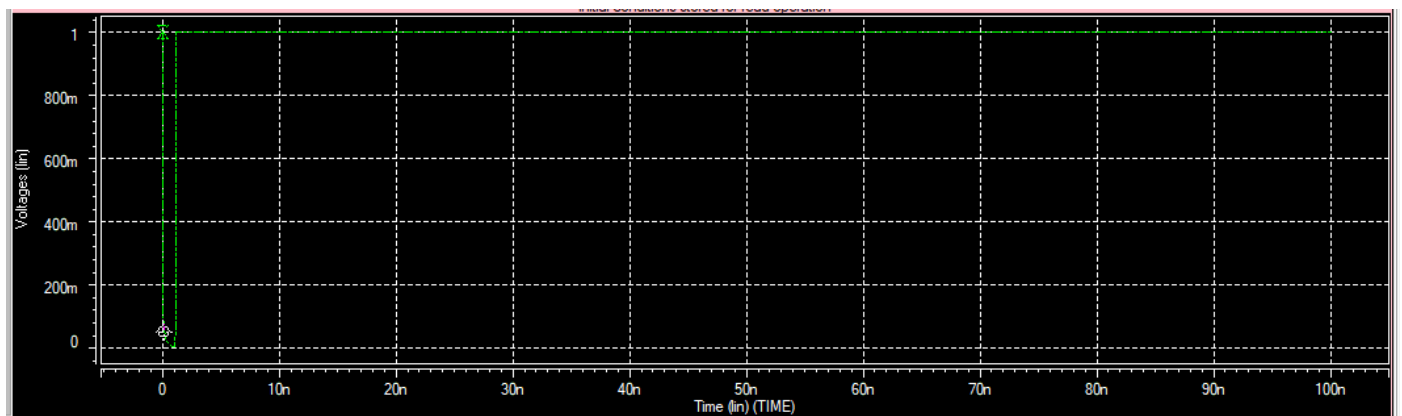
4. For $W/L=4$



5. For $W/L=5$

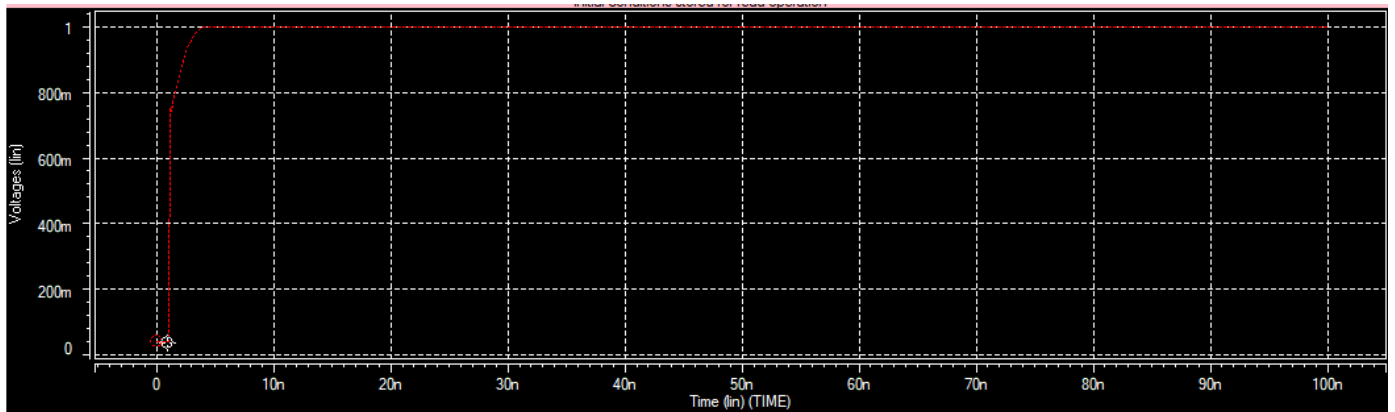


6. For $W/L=6$

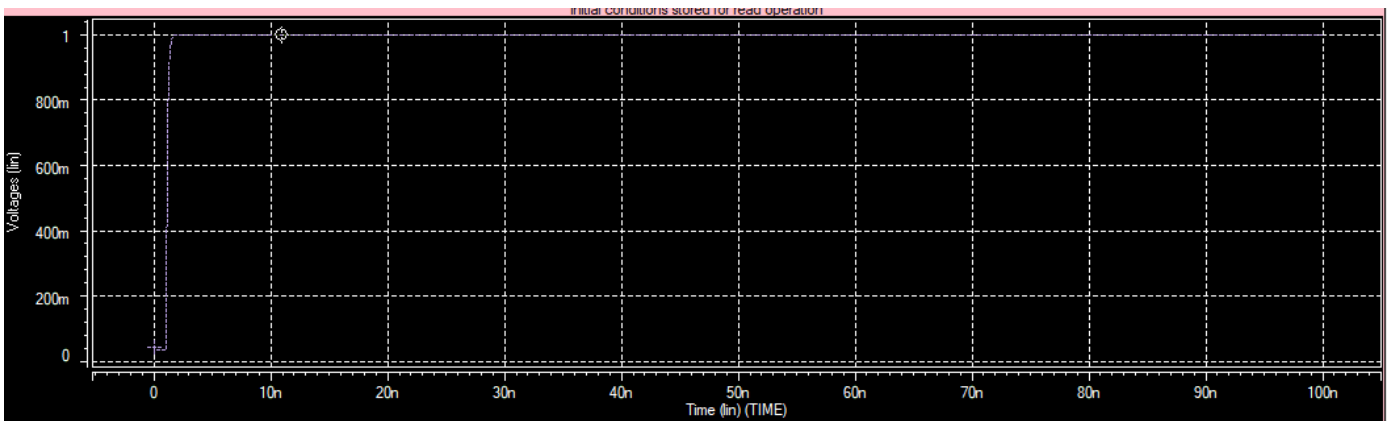


Voltage Vi5:

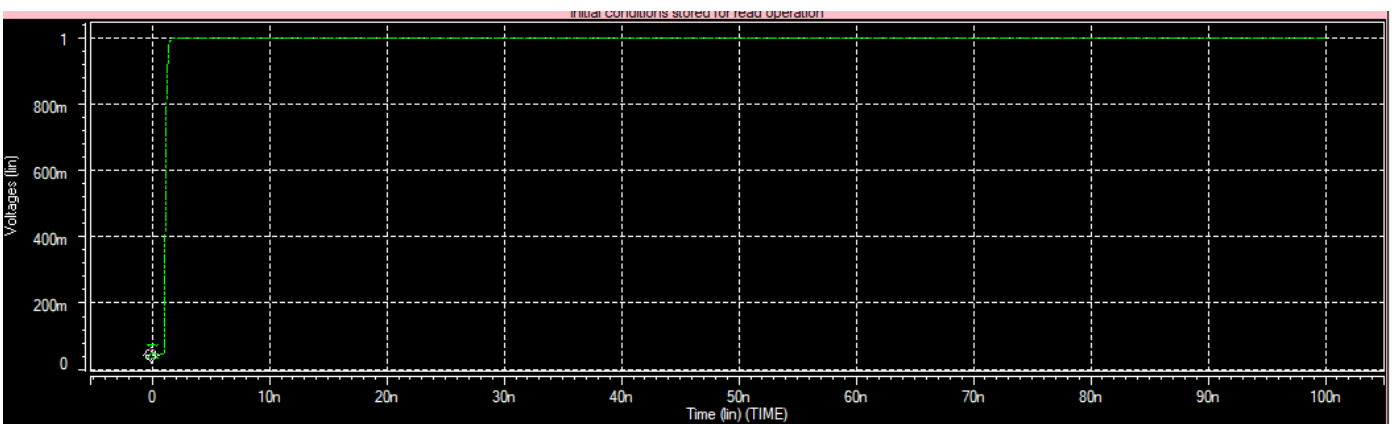
1. For $W/L=1$



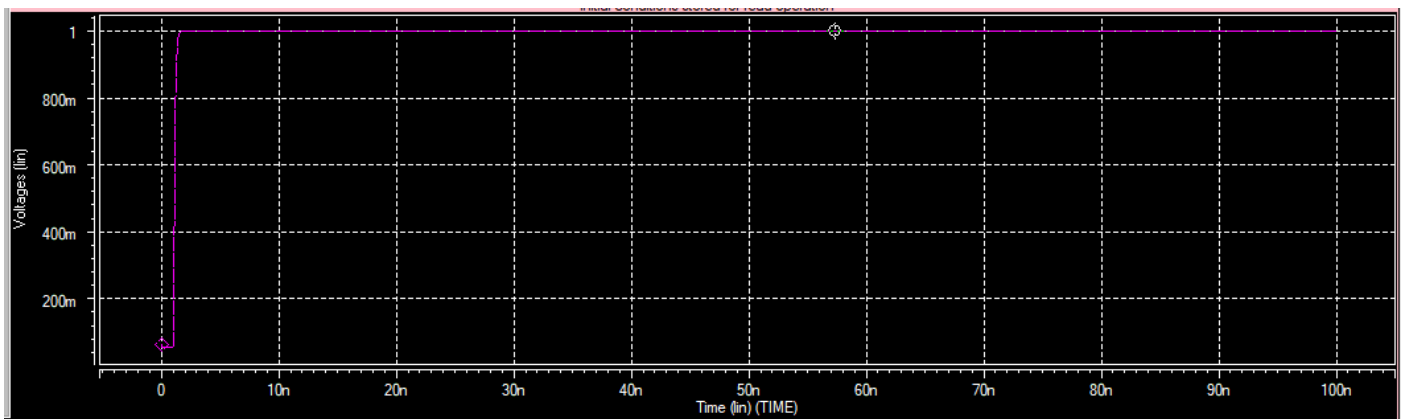
2. For $W/L=2$



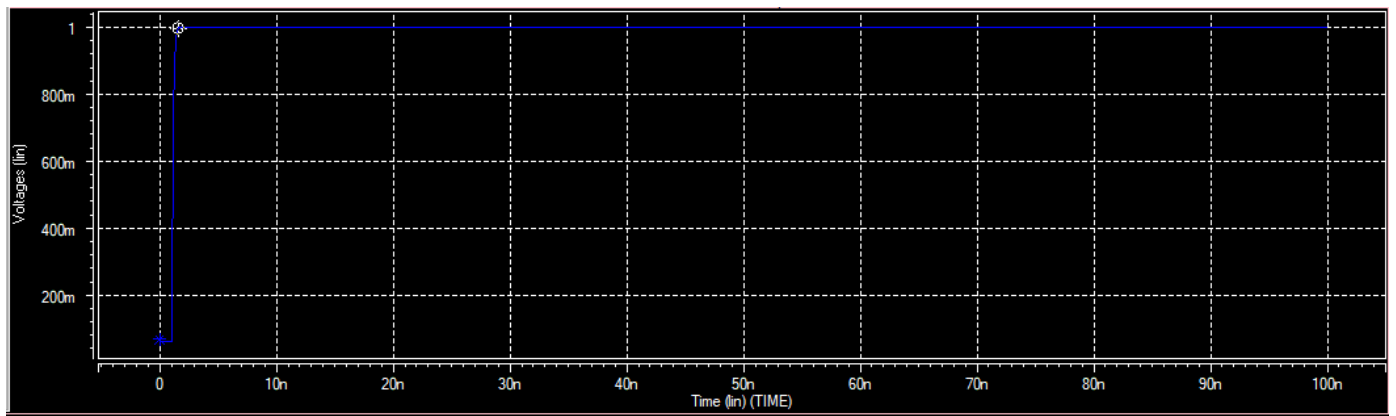
3. For $W/L=3$



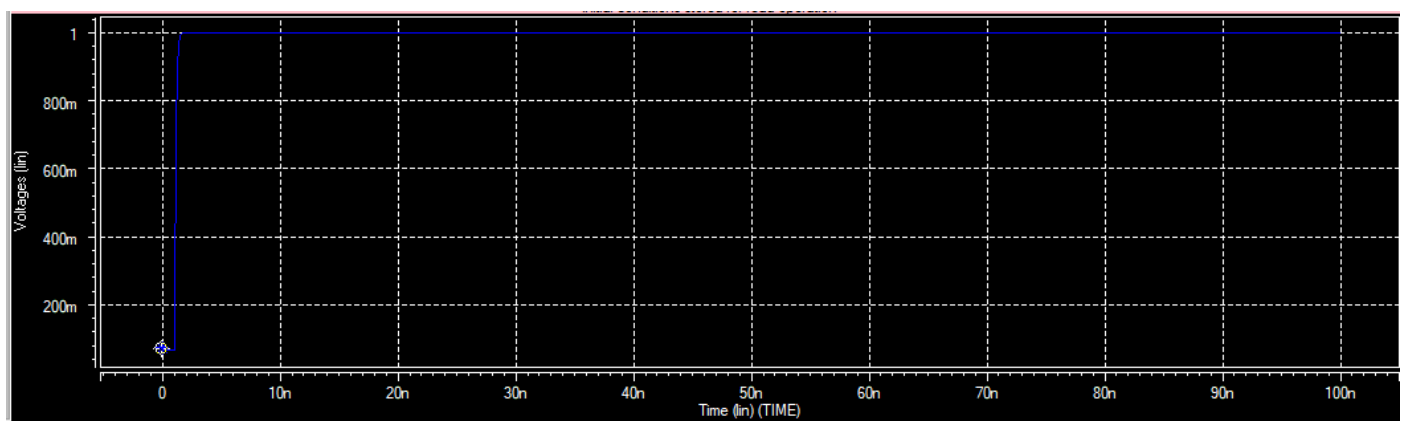
4. For $W/L=4$



5. For $W/L=5$

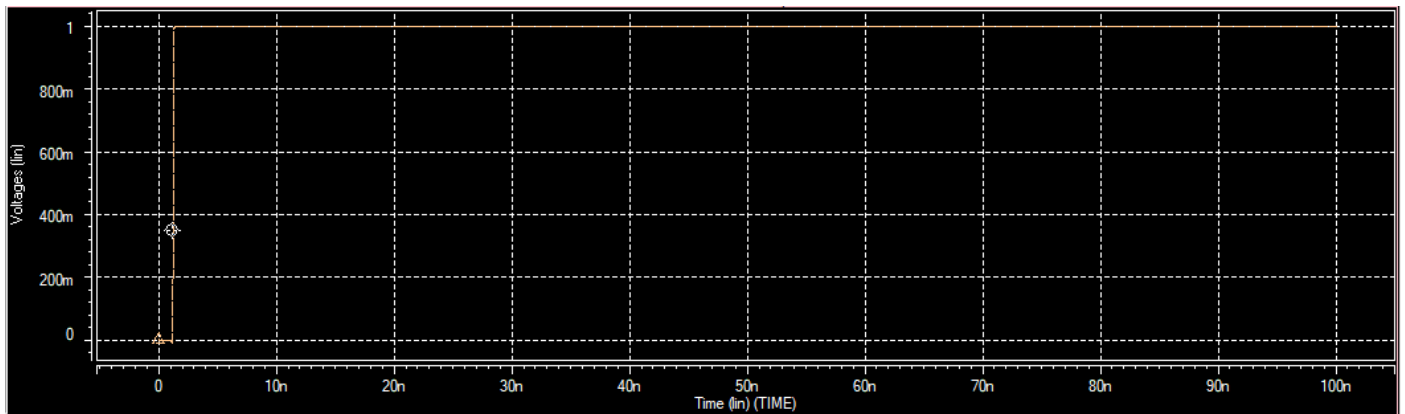


6. For $W/L=6$

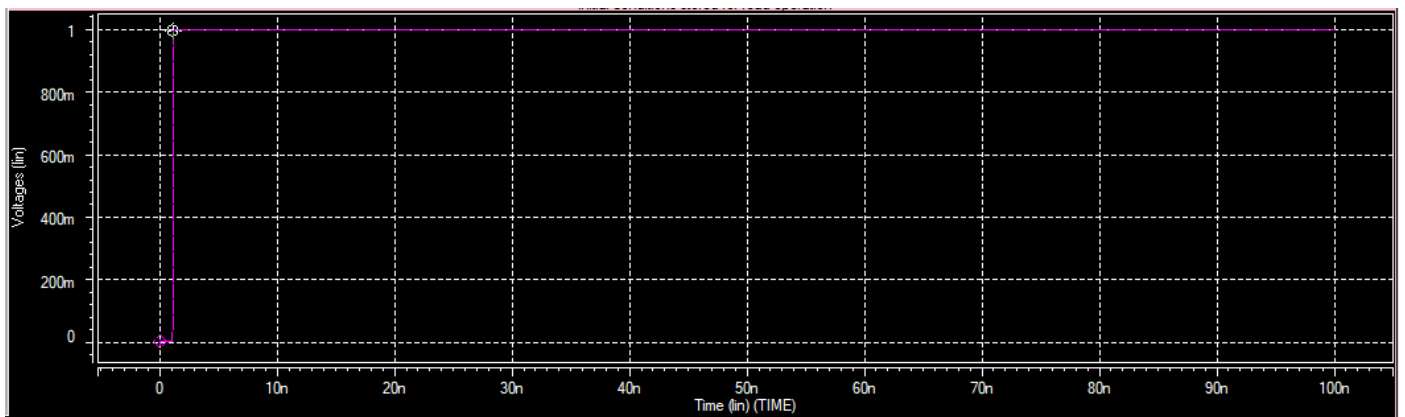


Voltage V_q :

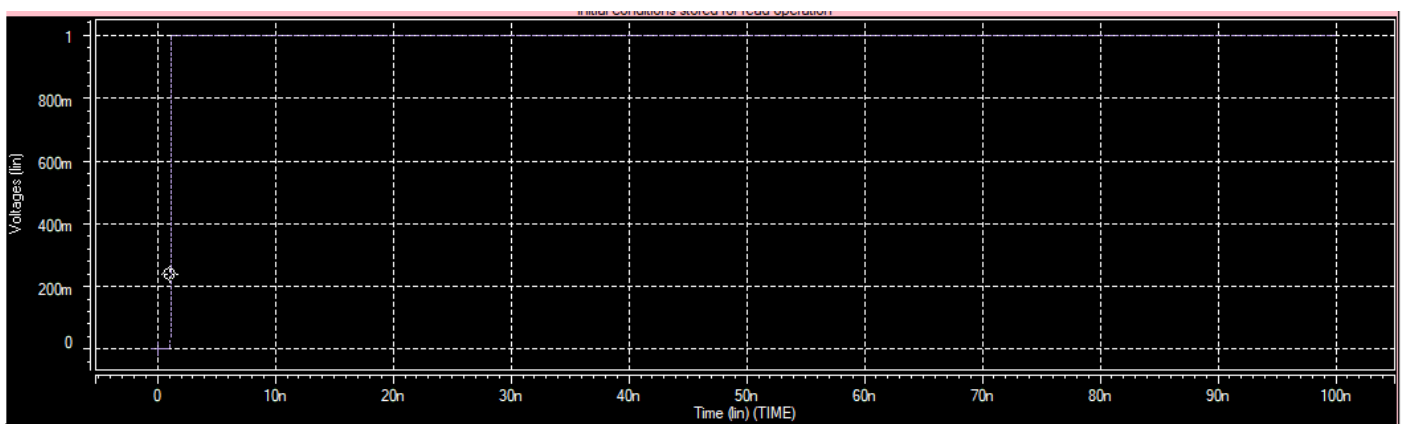
1. For $W/L=1$



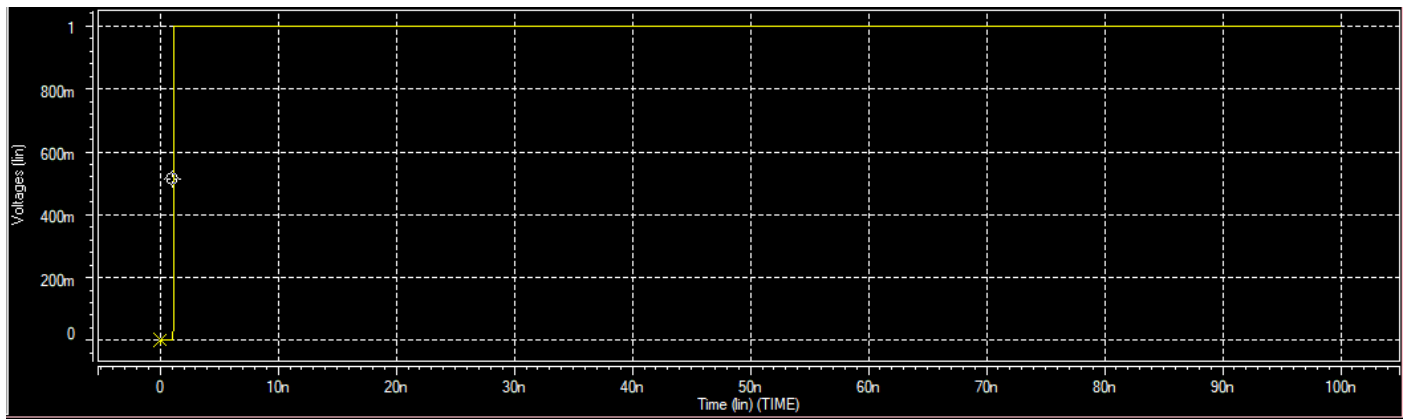
2. For $W/L=2$



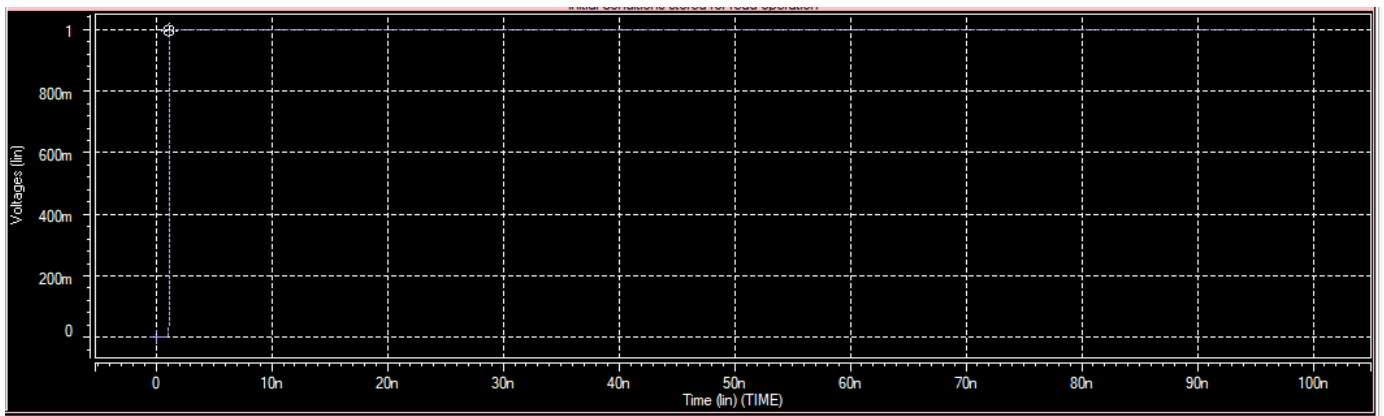
3. For $W/L=3$



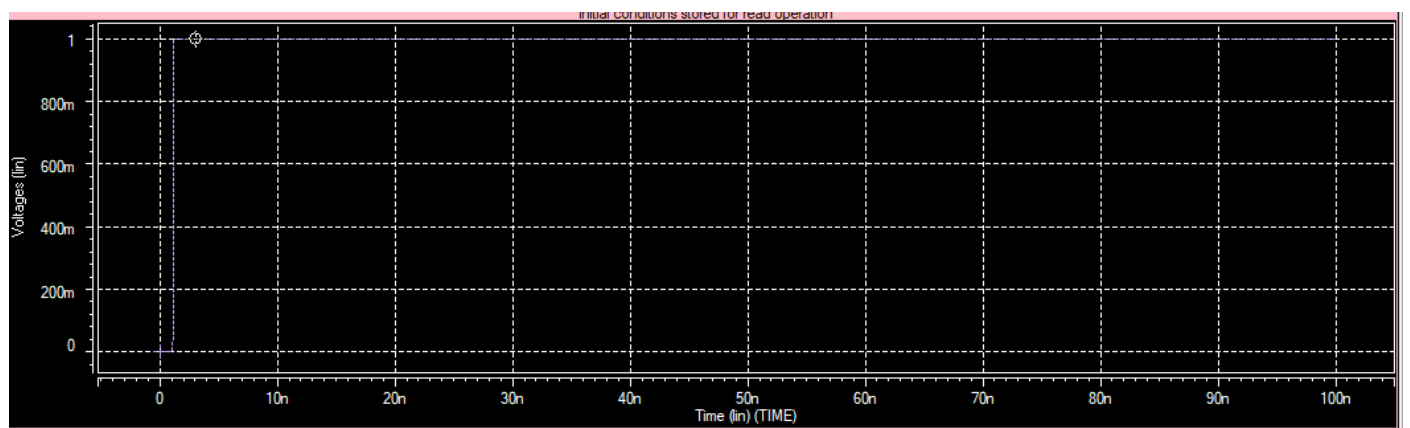
4. For $W/L=4$



5. For $W/L=5$

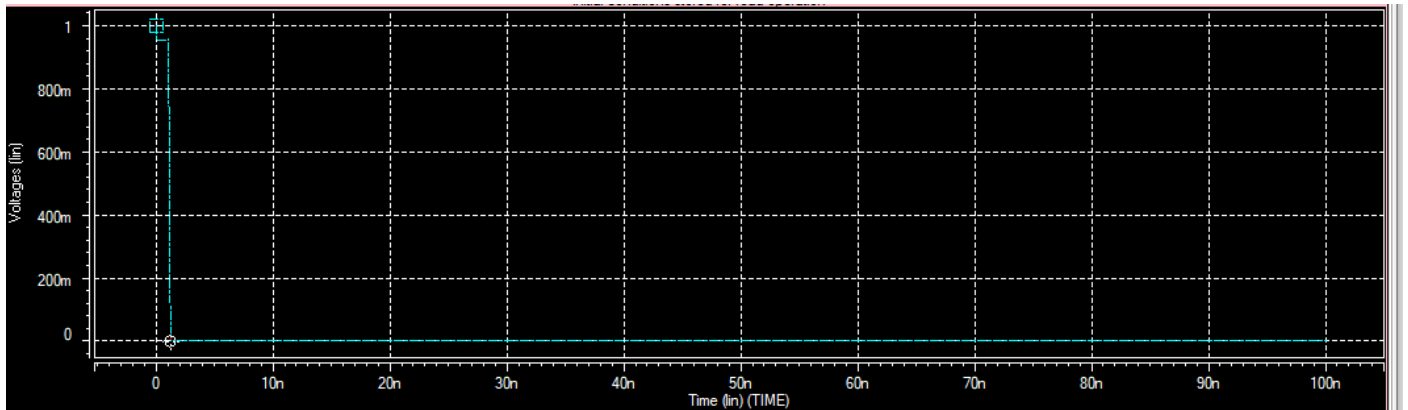


6. For $W/L=6$

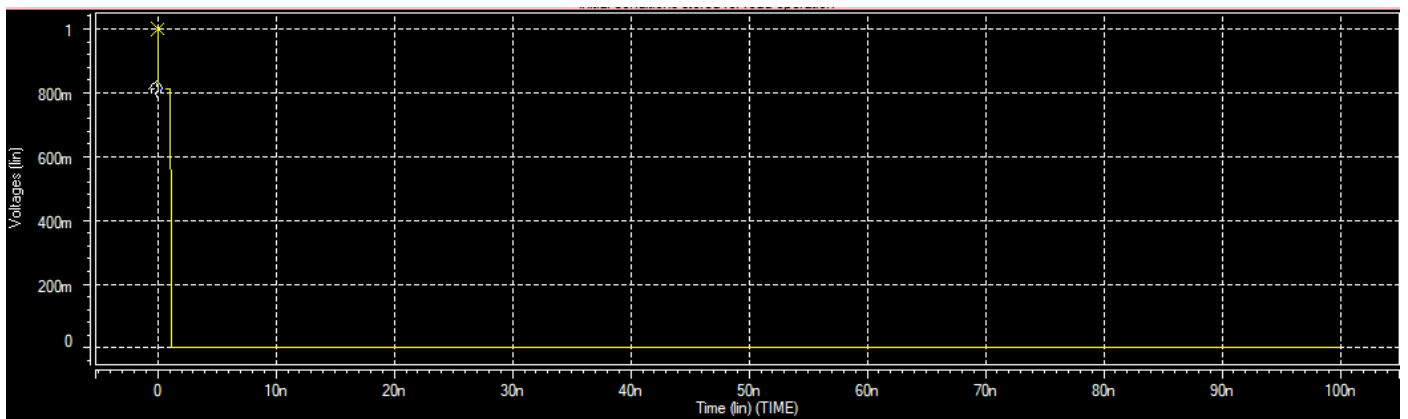


Voltage V_{qr} :

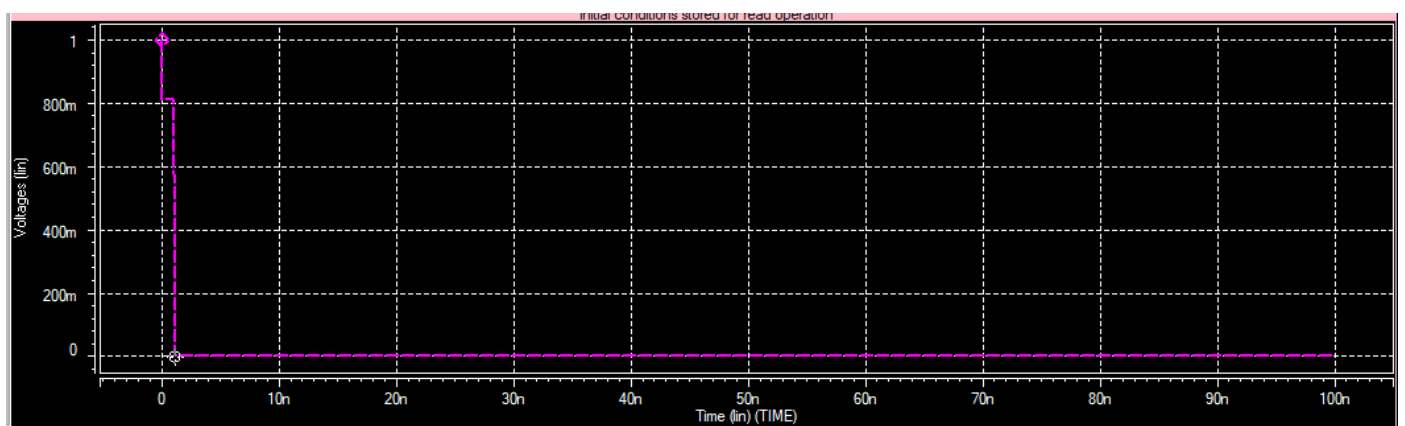
1. For $W/L=1$



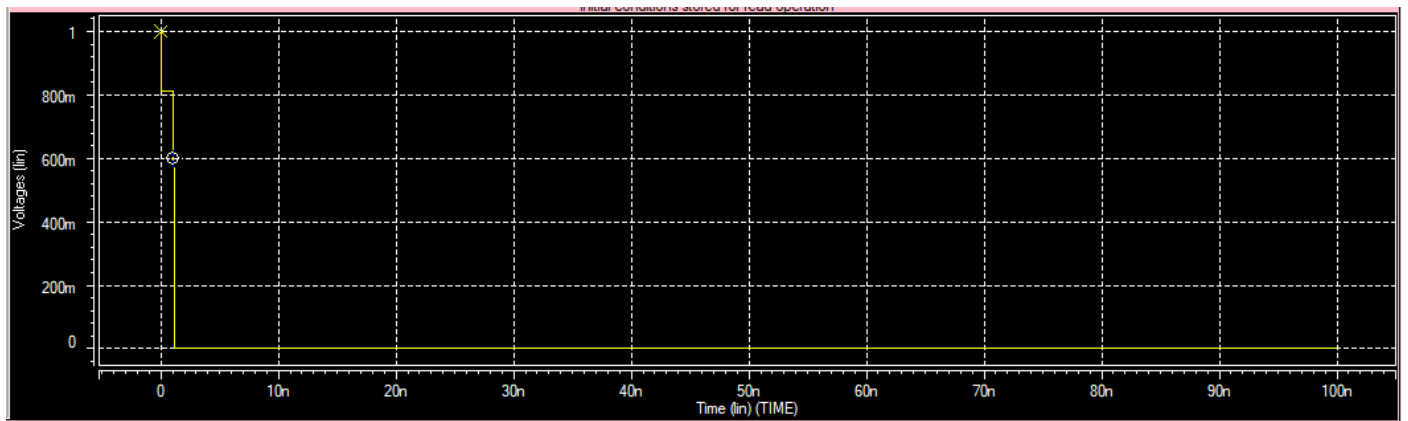
2. For $W/L=2$



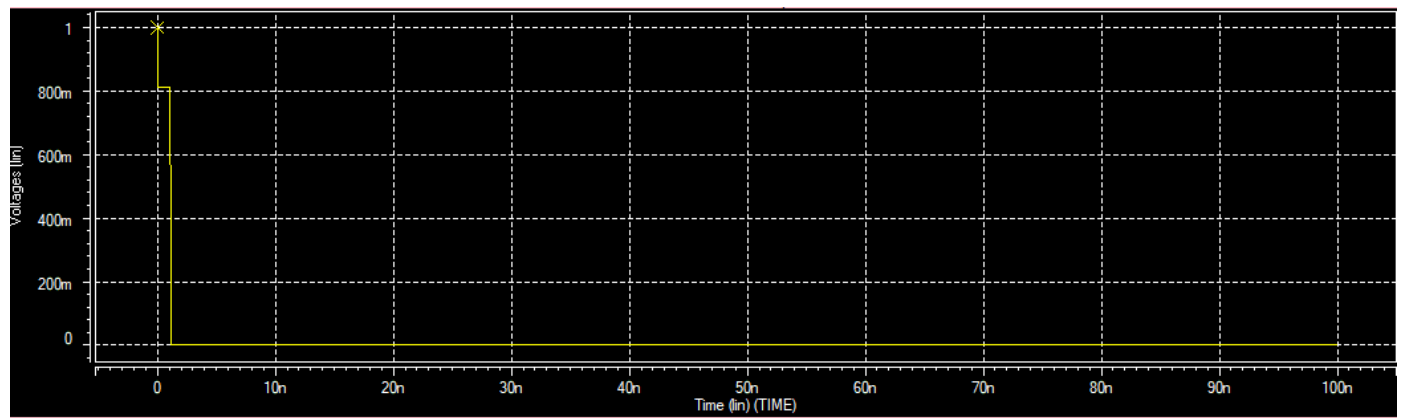
3. For $W/L=3$



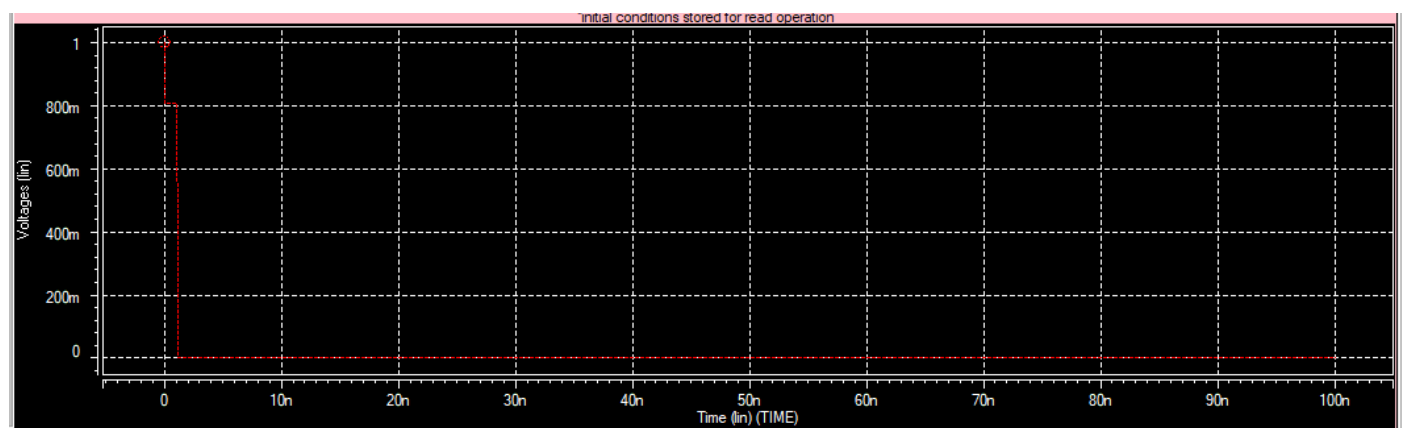
4. For $W/L=4$



5. For $W/L=5$

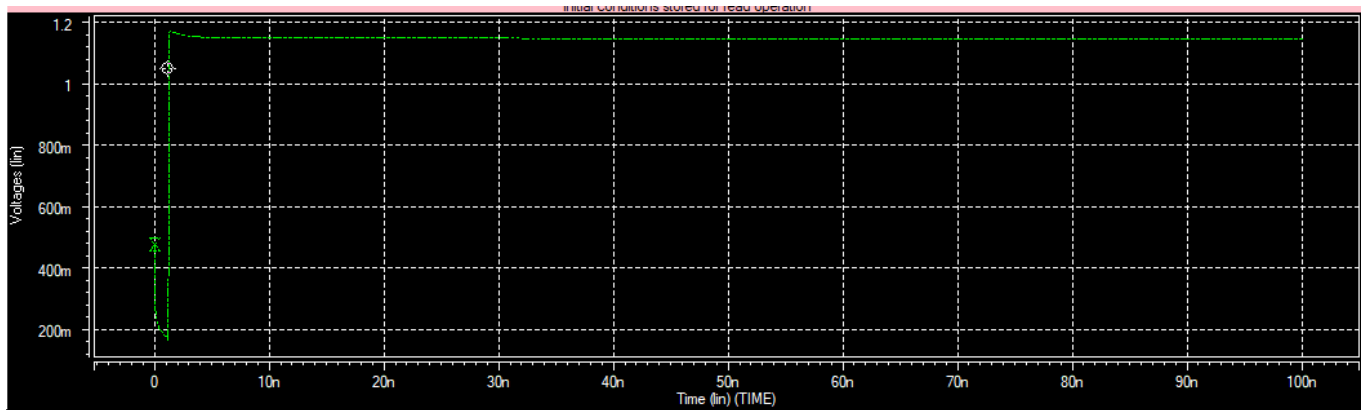


6. For $W/L=6$

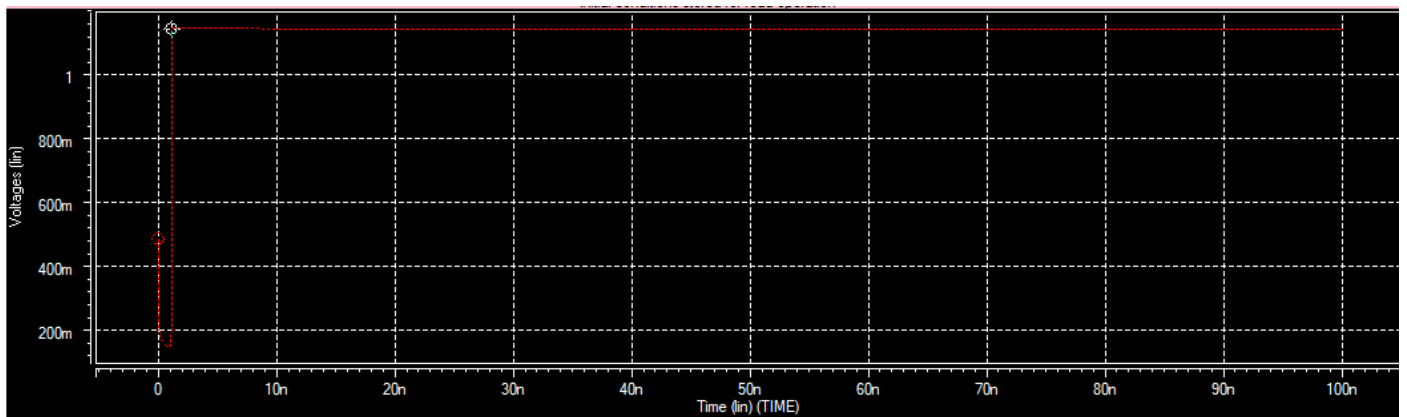


Voltage V_t :

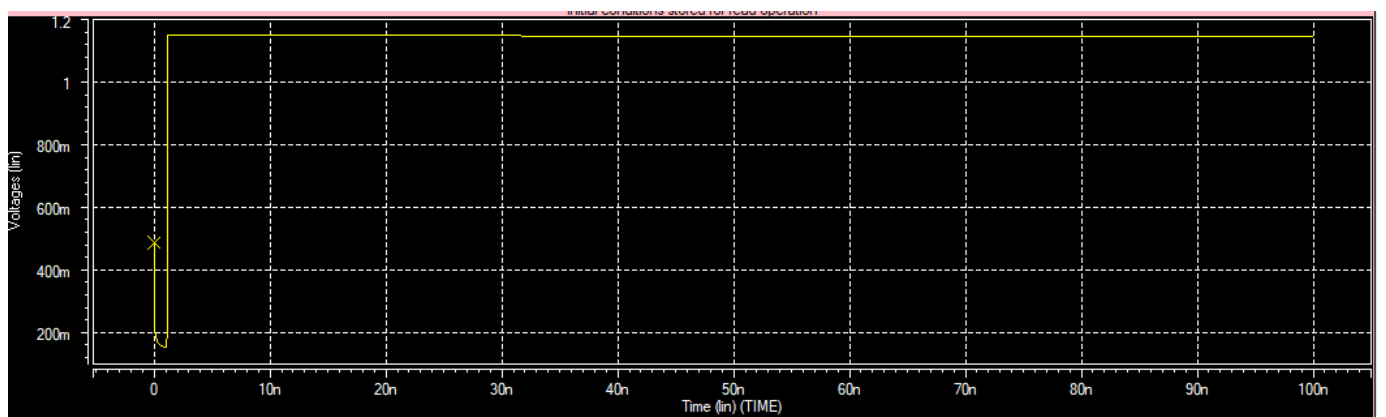
1. For $W/L=1$



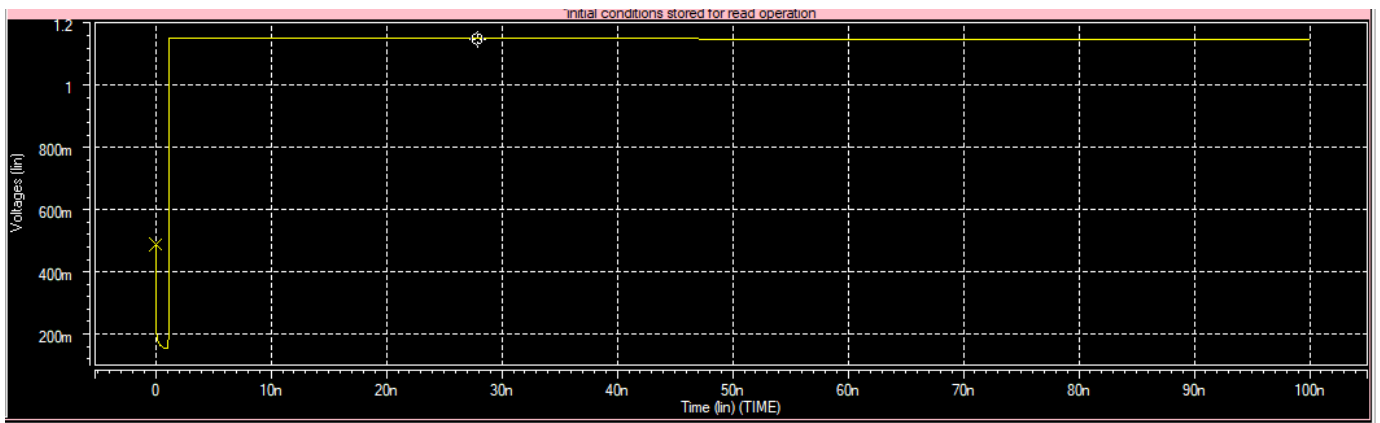
2. For $W/L=2$



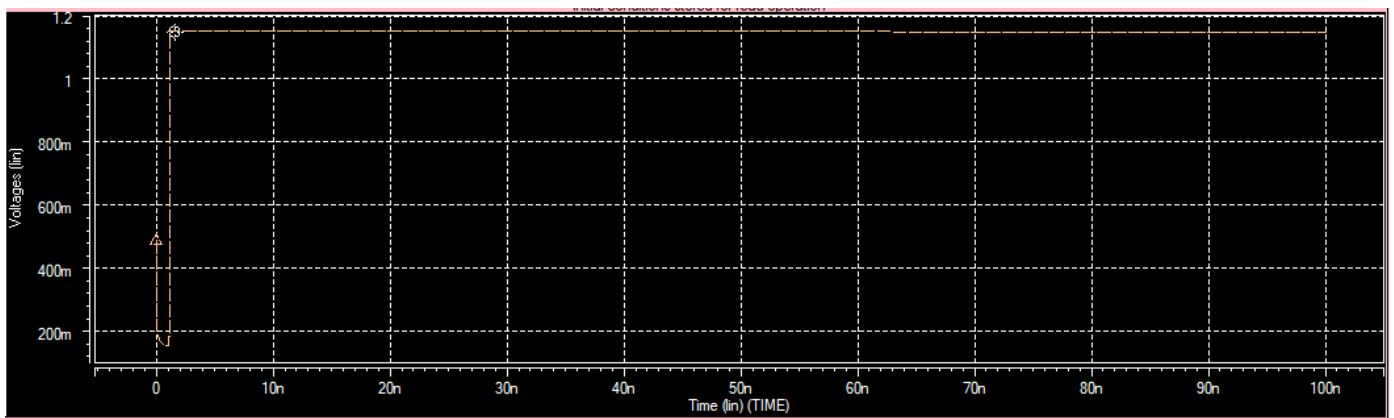
3. For $W/L=3$



4. For $W/L=4$



5. For $W/L=5$



6. For $W/L=6$

