CENTER OF NANOELECTRONICS & DEVICES

CND 121: Introduction to Silicon Process & VLSI

Assignment #: 1

Section #: 16

Submitted by:

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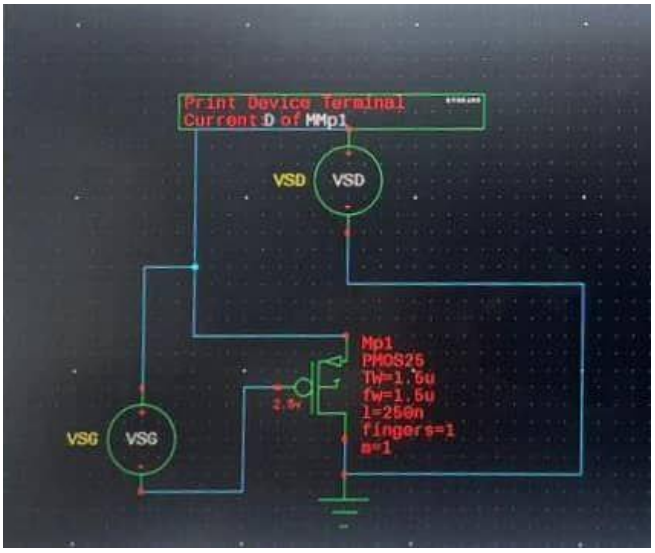
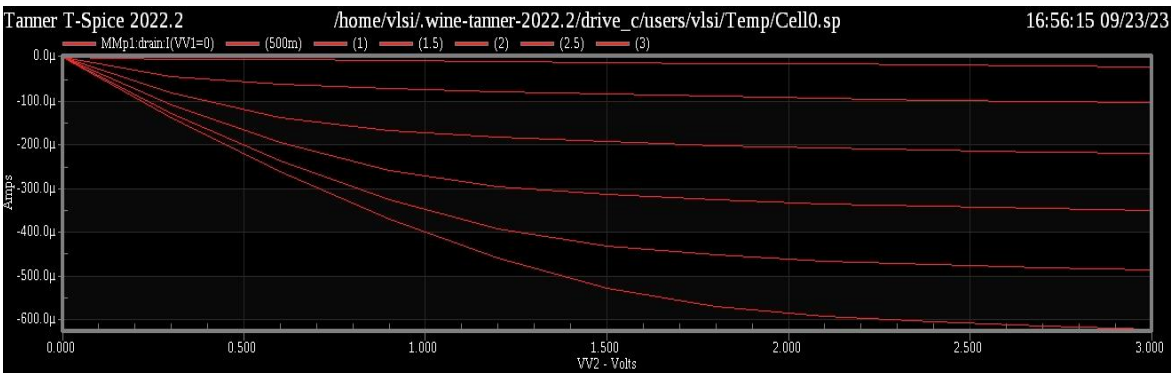
1. PMOS VI Characteristics

Do the same as in **Lab 01**, but instead of using **NMOS**, use **PMOS** and observe the characteristics of **PMOS**.

i. Add screenshot from your PMOS **schematic**:



ii. Add screenshot from your waveform viewer showing **PMOS IV Characteristics:**



iii. **Comment** on the results:

- **starting with VSG=0 the current will be 0Amps as the pmos transistor will be off and then by increasing VSG (negative Value) the current will increase also (negative as VSG is negative) and by increasing VSD the pmos transistor will be in the triode region until VSD = VSG –Vth as then the transistor will enter the saturation region and the current will almost be constant (with some increment due to channel length modulation)**

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