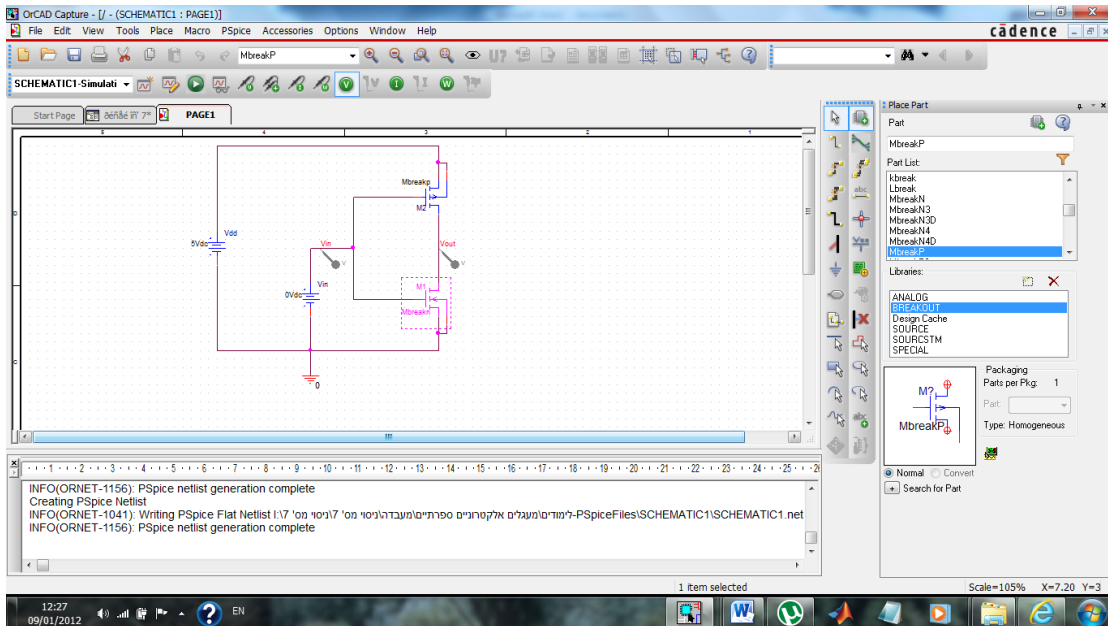
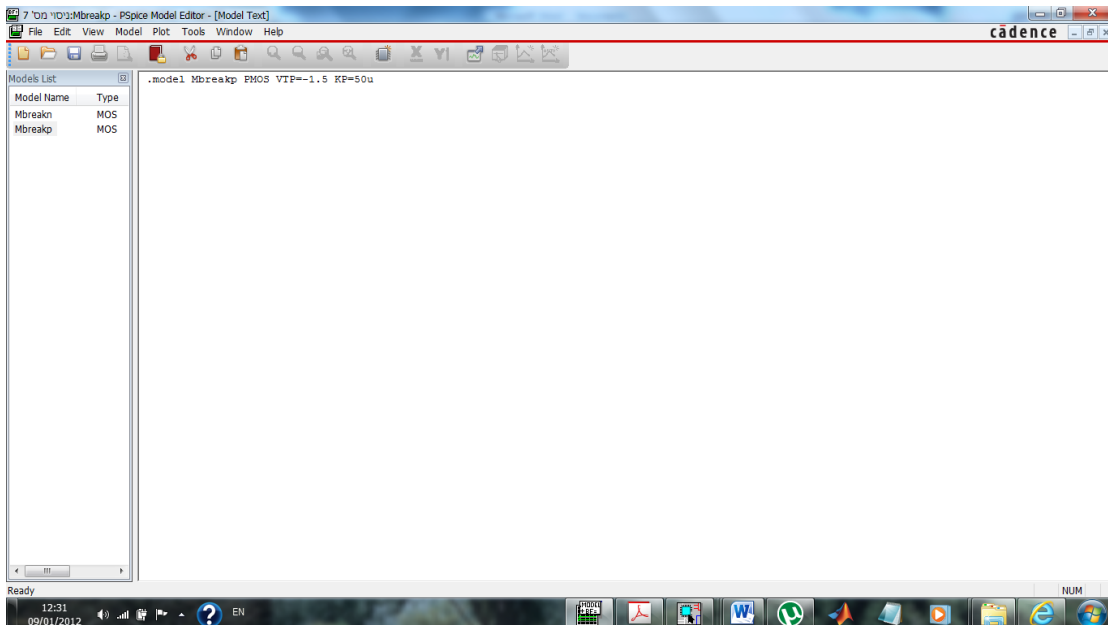


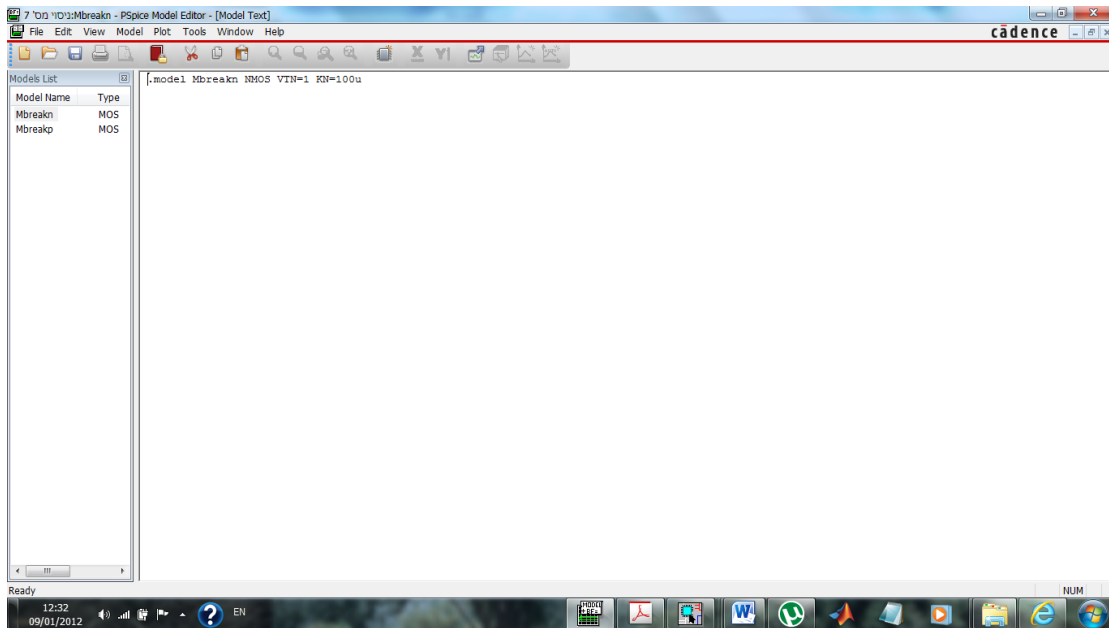
Hi.

I'm trying to simulate the following (static) CMOS inverter circuit with PSPICE, but can't figure out why I'm receiving an error message, which is also quite unclear:



I also defined the PMOS and NMOS transistors in the following way:





The circuit's parameters are given below:

$$V_{DD} = 5 \text{ V}; \quad V_{TN} = 1 \text{ V}; \quad V_{TP} = -1.5 \text{ V}; \quad K_N = 100 \frac{\mu\text{A}}{\text{V}^2}; \quad K_P = 50 \frac{\mu\text{A}}{\text{V}^2}$$

And the simulation used is a DC sweep (primary sweep only) simulation, as V_{in} 's start value is 0 V, its end value is 5 V and the increment chosen is 0.01 V.

The error message I get appears in the next page:

**** 01/09/12 12:47:31 **** PSpice 16.5.0 (April 2011) **** ID# 0 ****

** Profile: "SCHEMATIC1-Simulation 1" [I:\7 לימודים\מעבדה\ניסוי מס' 7\Lab 7-
PSpiceFiles\SCHEMATIC1\Simulat

**** CIRCUIT DESCRIPTION

** Creating circuit file "Simulation 1.cir"

** WARNING: THIS AUTOMATICALLY GENERATED FILE MAY BE OVERWRITTEN BY
SUBSEQUENT SIMULATIONS

*Libraries:

* Profile Libraries :

* Local Libraries :

.LIB ".././lab 7-pspicefiles/lab 7.lib"

* From [PSPICE NETLIST] section of C:\Cadence\SPB_16.5\tools\PSpice\PSpice.ini file:

.lib "nom.lib"

*Analysis directives:

.DC LIN V_Vin 0 5 0.01

.PROBE V(alias(*)) I(alias(*)) W(alias(*)) D(alias(*)) NOISE(alias(*))

.INC "../SCHEMATIC1.net"

**** INCLUDING SCHEMATIC1.net ****

* source LAB 7

M_M2 VOUT VIN N15255 N15255 Mbreakp

V_Vin VIN 0 0Vdc

M_M1 VOUT VIN 0 0 Mbreakn

V_Vdd N15255 0 5Vdc

**** RESUMING "Simulation 1.cir" ****

.END

INFO(ORPSIM-15423): Unable to find index file "lab 7.ind" for library file "lab 7.lib".

INFO(ORPSIM-15422): Making new index file "lab 7.ind" for library file "lab 7.lib".

Index has 2 entries from 1 file(s).

**** FROM LIBRARY ".././lab 7-pspicefiles/lab 7.lib" ****

.model Mbreakp PMOS VTP=-1.5 KP=50u

-----\$

ERROR -- 'VTP' is not a model parameter name

.model Mbreakn NMOS VTN=1 KN=100u

-----\$

ERROR -- 'VTN' is not a model parameter name

What am I doing wrong, and how to solve that issue?

Thanks! 😊