

Assignemnt\_1 EE671

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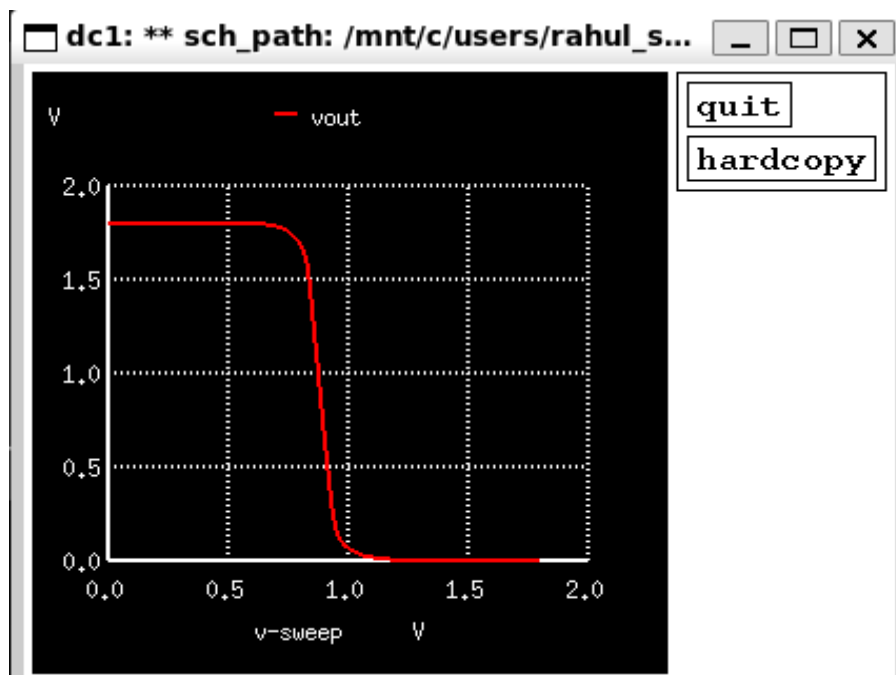
Roll No: 22B1822

Q1)

INVERTER DESIGN PARAMETER	VALUE (in $\mu\text{m}$ )
PMOS WIDTH	1.273
PMOS LENGTH	0.15
NMOS WIDTH	0.4
NMOS LENGTH	0.15

INVERTER DYNAMIC CHARACTERISTIC	VALUE
RISE TIME $t_r$ (in ps)	18.16
FALL TIME $t_p$ (in ps)	18.16
PROPAGATION DELAY $t_p$ (in ps)	22.36

INVERTER STATIC CHARATERISTIC	VALUE (in V)
$V_{ih}$	0.997
$V_{il}$	0.762
$NM_h$	0.803
$NM_l$	0.762
$V_m$	0.867



Q2)

INVERTER DESIGN PARAMETER	VALUE (in $\mu\text{m}$ )
PMOS WIDTH	2.546
PMOS LENGTH	0.15
NMOS WIDTH	0.8

NMOS LENGTH 0.15

INVERTER DYNAMIC CHARACTERISTIC VALUE

RISE TIME  $t_r$  (in ps) 11.59

FALL TIME  $t_p$  (in ps) 11.99

PROPAGATION DELAY  $t_p$  (in ps) 18.06

INVERTER STATIC CHARACTERISTIC VALUE (in V)

$V_{ih}$  1.023

$V_{il}$  0.7707

$NM_h$  0.777

$NM_l$  0.7707

$V_m$  0.887

