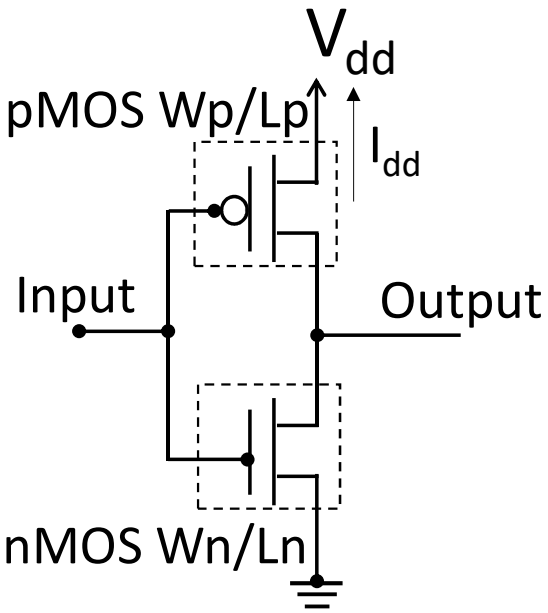
An Assignment of Homework #1

1. DC Analysis



a. Plot the transfer curve in function of the V_{input} as x axle against V_{output} as y axle with V_{dd}= 1V and different ratios of Wp/Wn, such as 0.5, 1, and 2.

b. Plot the transfer curve in function of the V_{input} as x axle against V_{output} as y axle with different values of V_{dd}= 1V, 0.8V, 0.6V, and 0.4V.

c. Plot the I_{dd}, which flows from the ground to the V_{dd}, in function of the V_{input}. You may sweep the V_{input} from 0V to V_{dd} to collect the data of I_{dd} and plot it.

d. Plot the output power, which is defined as $P_{output}=V_{output}xI_{dd}$. You may sweep the V_{input} from 0V to V_{dd} to collect the data of I_{dd} and V_{output}.

- Deadline: 23:59:59 pm, 25th, Oct., 2022 (Tues.)
- Uploaded files include;
  - 1. your simulated results (the figures and related description of sentences.) in **the format of PDF (the WORD file and TXT file are not allowed.)**
  - **2. Your source codes (You can attach your source codes in the end of your PDF file, or you can save it a separated pdf file.**
- DO NOT just upload few words without any figures nor description.
- Please zip all your files together, named by your school-ID and your name. i.e., 123456789-謝易叡.zip. And only upload one zipped file to the homework region of eeclass2.
- Grating: each question deserves 25 points.
- Do not copy nor plagiarism (剽竊)! Or your homework score will be zero.
- You can still submit if delayed. The score will be 30% off.