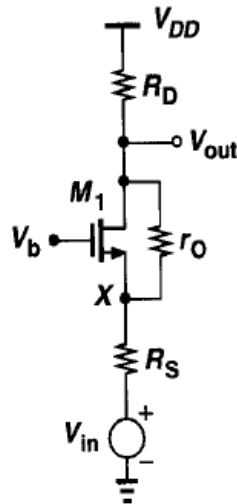


3. Calculate the gain of the common-gate amplifier as shown below considering both CLM and Body-effect.



4. Explain the working of folded cascode circuit using large-signal analysis. [Hint: Refer Page 90 of Razavi's Book]

5. Explain the operation of Gilbert cell. Can Gilbert cell operate as an analog voltage multiplier? [Hint: Refer Page 126 of Razavi's Book]

6. Problem 4.16 of Razavi's Book

Assuming all the circuits to be symmetric, Plot V_{out} as V_{in1} and V_{in2} vary differentially from 0 to V_{DD} .

