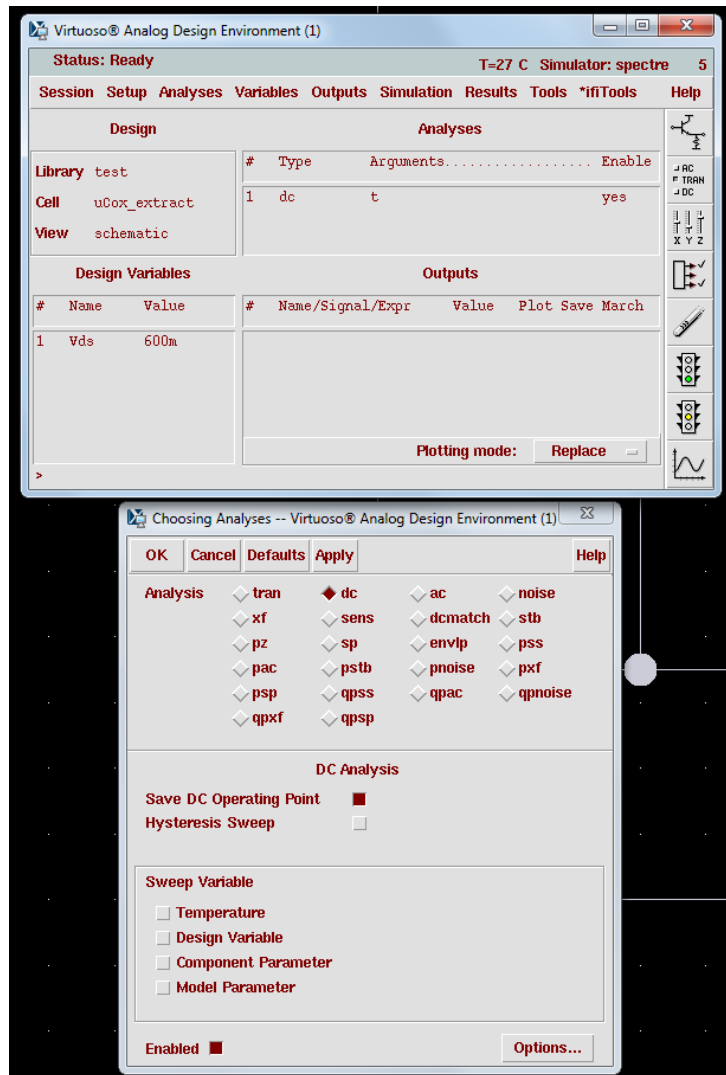
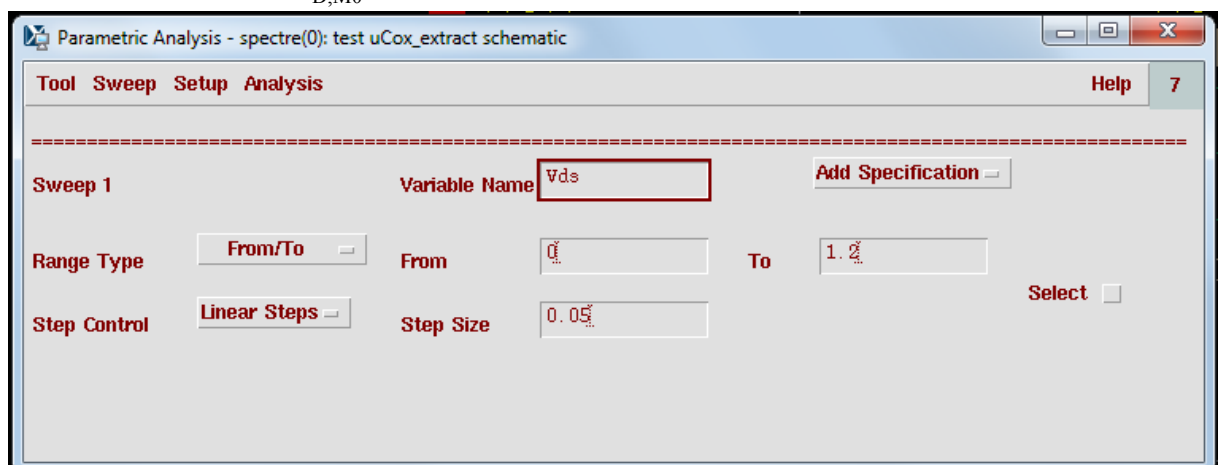


2) Open Virtuoso Analog Design Environment and do the following setting:



3) Go to "Tool" → "Parametric Analysis". Do a DC simulation sweeping Vds from 0 to 1.2. Remember to save the $I_{D,M0}$.



- 4) Plot $I_{D,M0}$ and extract μC_{ox} .
 - 5) Notice μC_{ox} changes with transistor length (especially for small length transistors). Repeat this simulation if you are using small length transistors.
 - 6) Go to “Tool”→ “Result Brower”, you can find all your simulation results here. Select “dcOpinfo-info” “M0”, and right click “gds” and select calculator. Plot r_o (i.e. $1/g_{ds}$) on the calculator, is r_o linear or a constant? r_o changes (a lot) with the transistor size and the biasing condition.
- **Always remember only the post-layout simulation results are trustable!**

