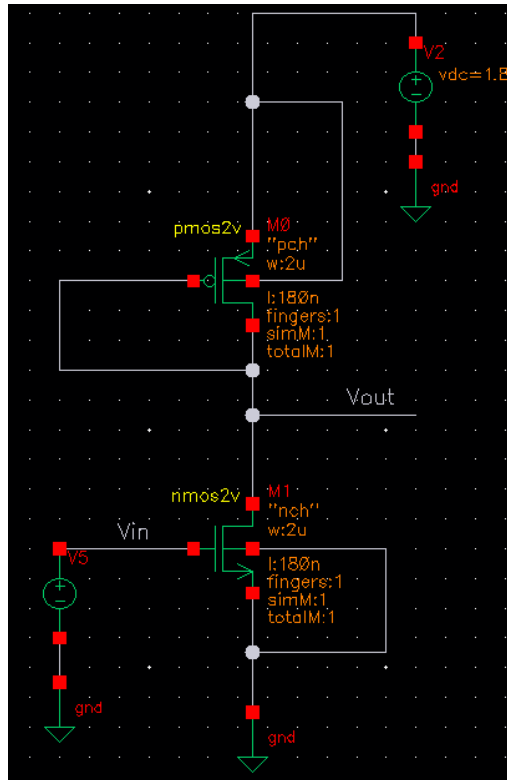


DC Sweep Simulation

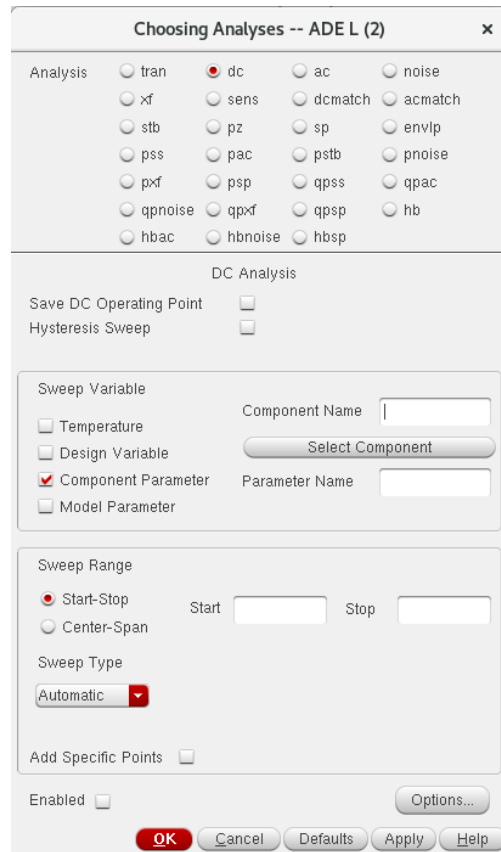
Author: Jinhua Wang

A common-source amplifier with diode-connected load is used as example

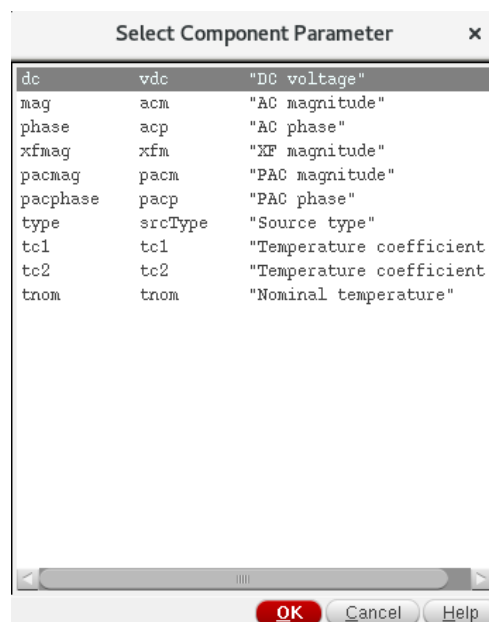
1. First create a schematic that matches the figure. Please refer to “01_Schematic_Creation” if you do not know how to create a schematic
 - a. Use “vdc” for VDD, and set it to **1.8 V**
 - b. Use “vdc” for input, you do not need to set values for it



2. Go to **Launch**, select **ADE L**
3. Select **Choose Analyses**
4. Set **Analysis** to **dc**
5. Under **Sweep Variable**, check **Component Parameter**



6. If you know the names of the component and the parameter that you want to sweep, enter their names in **Component Name** and **Parameter**. If you do not know them, click **Select Component**
7. Your schematic will pop up, and click **V5**, which is the **input voltage source**
8. **Select Component Parameter** window will pop up, click **DC voltage** and then click **OK**



9. Set the **Sweep Range** as below, and click **OK**

Choosing Analyses -- ADE L (2) [X]

Analysis

<input type="radio"/> tran	<input checked="" type="radio"/> dc	<input type="radio"/> ac	<input type="radio"/> noise
<input type="radio"/> xf	<input type="radio"/> sens	<input type="radio"/> dcmatch	<input type="radio"/> acmatch
<input type="radio"/> stb	<input type="radio"/> pz	<input type="radio"/> sp	<input type="radio"/> envlp
<input type="radio"/> pss	<input type="radio"/> pac	<input type="radio"/> pstb	<input type="radio"/> pnoise
<input type="radio"/> pxf	<input type="radio"/> psp	<input type="radio"/> qpss	<input type="radio"/> qpac
<input type="radio"/> qpnoise	<input type="radio"/> qpxf	<input type="radio"/> qpsp	<input type="radio"/> hb
<input type="radio"/> hbac	<input type="radio"/> hbnoise	<input type="radio"/> hbsp	

DC Analysis

Save DC Operating Point

Hysteresis Sweep

Sweep Variable

<input type="checkbox"/> Temperature	Component Name	<input type="text" value="/V5"/>
<input type="checkbox"/> Design Variable	<input type="button" value="Select Component"/>	
<input checked="" type="checkbox"/> Component Parameter	Parameter Name	<input type="text" value="dc"/>
<input type="checkbox"/> Model Parameter		

Sweep Range

Start-Stop Start Stop

Center-Span

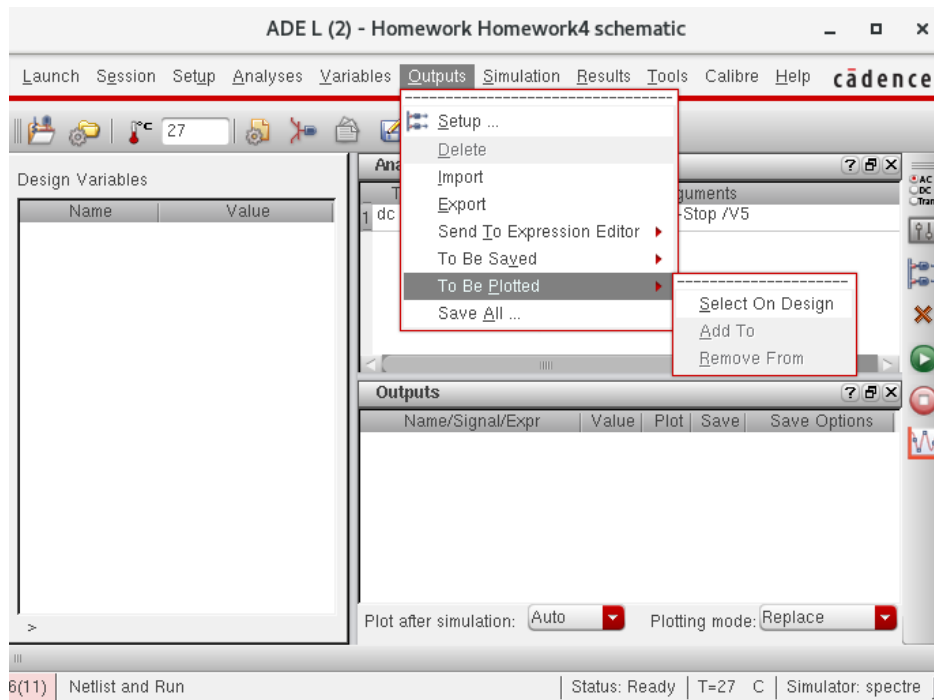
Sweep Type

[v]

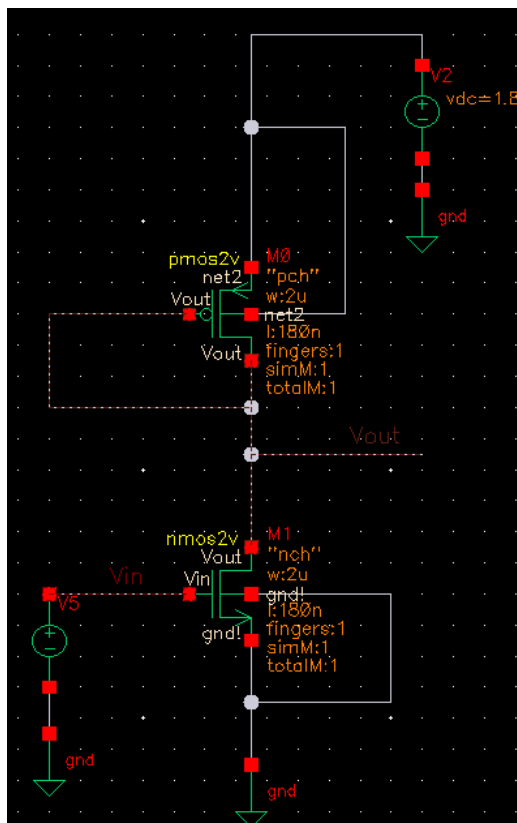
Add Specific Points

Enabled

10. In ADE L, click **Outputs - To Be Plotted - Select On Design**



11. Select the input and output wires on the schematic



12. Click **Netlist and Run** in ADE L
13. The DC sweep plot will pop up

