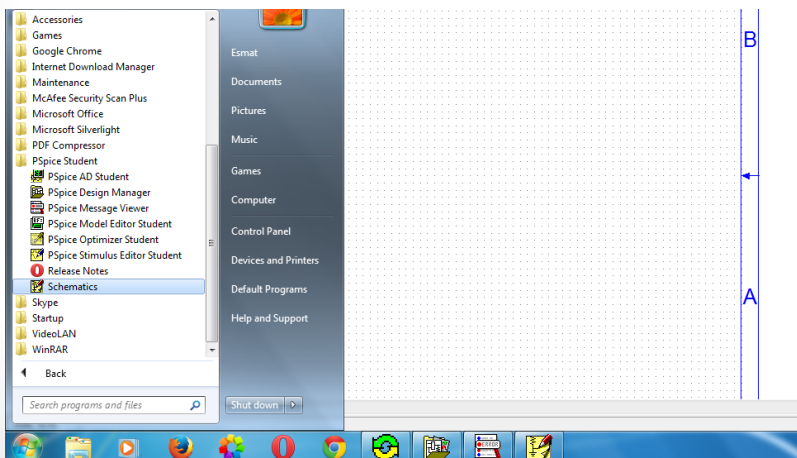


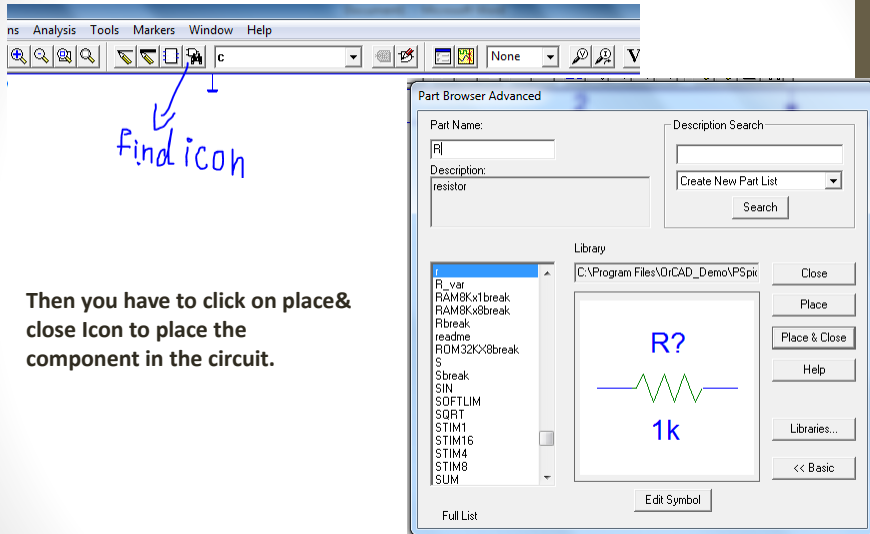
# Pspice Tutorial

Electronics Lab.EE3102

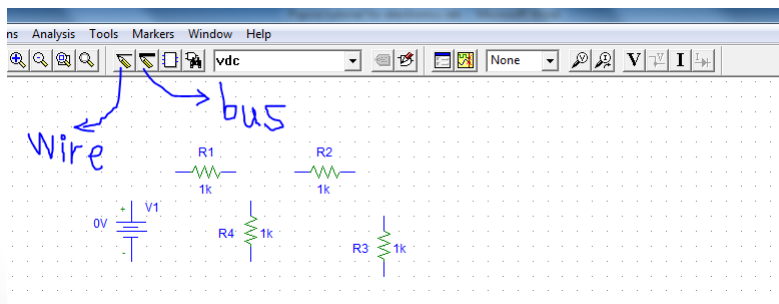
## How to inter to program:



## How to get and place components:

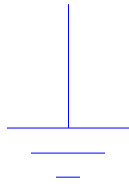


## Drawing wires (CTRL+W):

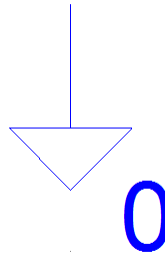


# Grounding

GND\_Earth

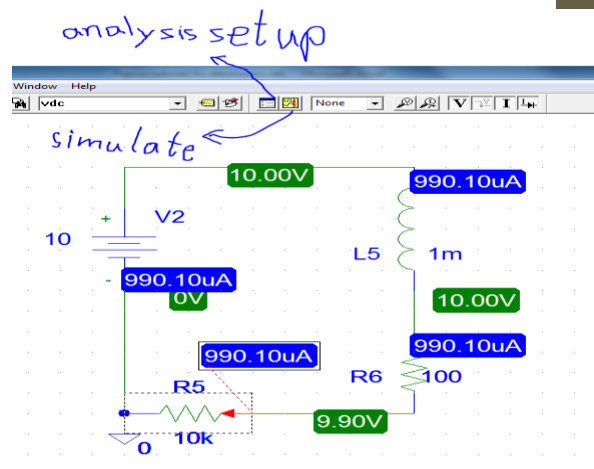


GND\_Analog

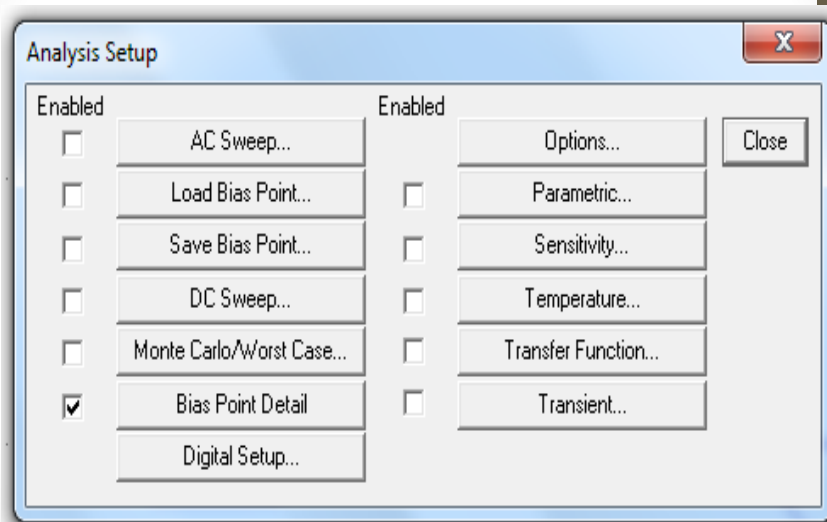


# Types of simulation :

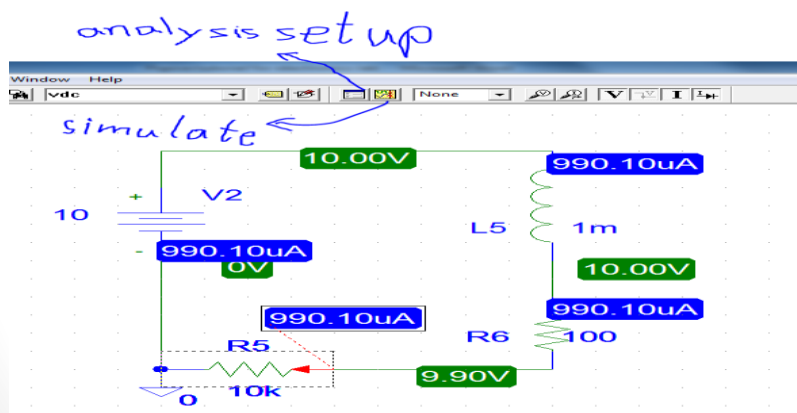
\*\*\*NOTE: Before simulation you have to save your schematic.



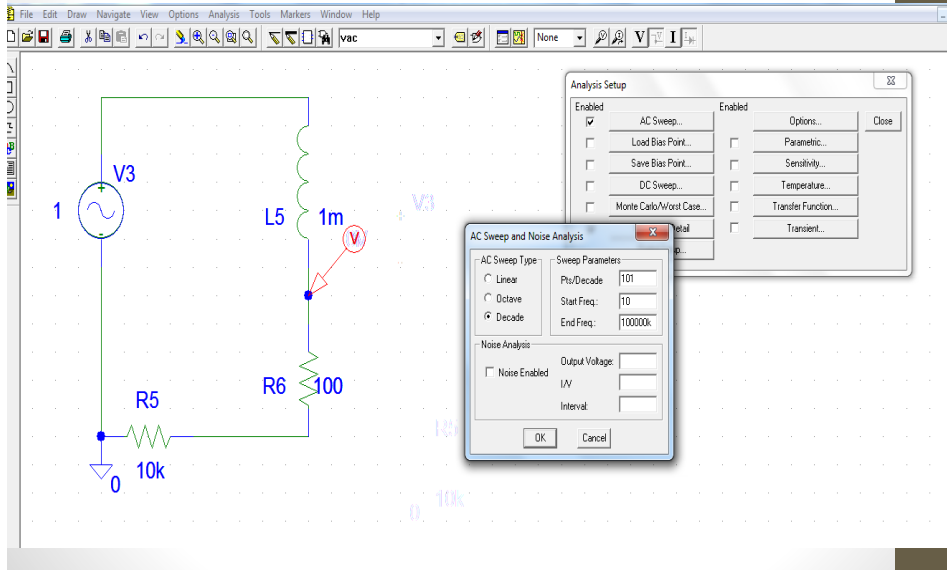
## Types of simulation :



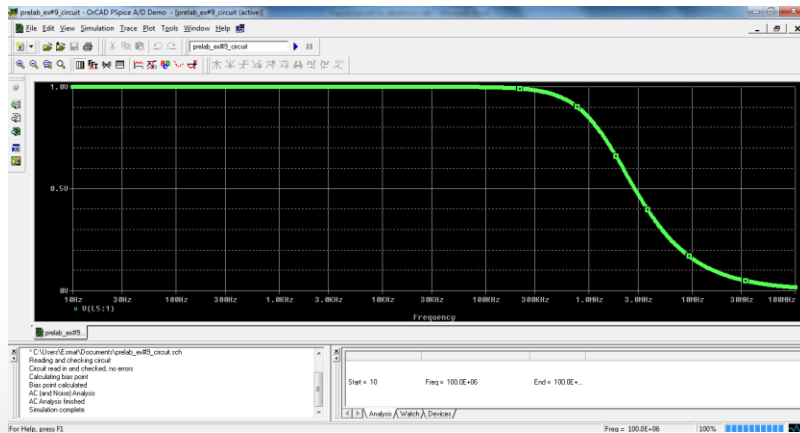
1-Bias Point Detail: this is used in DC analysis at a certain point of input only.



2-AC Sweep: this type used to plot the response in the frequency domain.

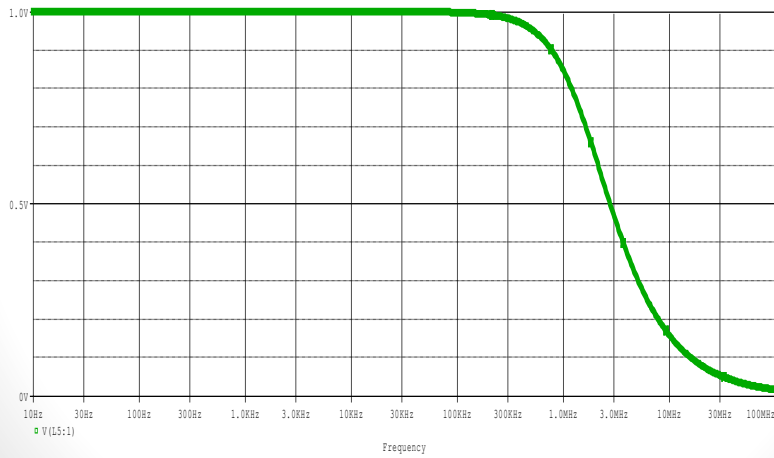


Output:

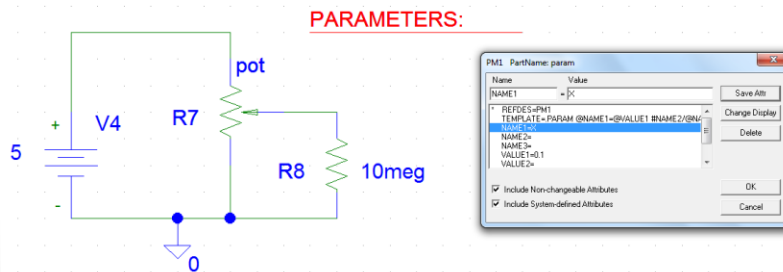


Note: To get clear output:

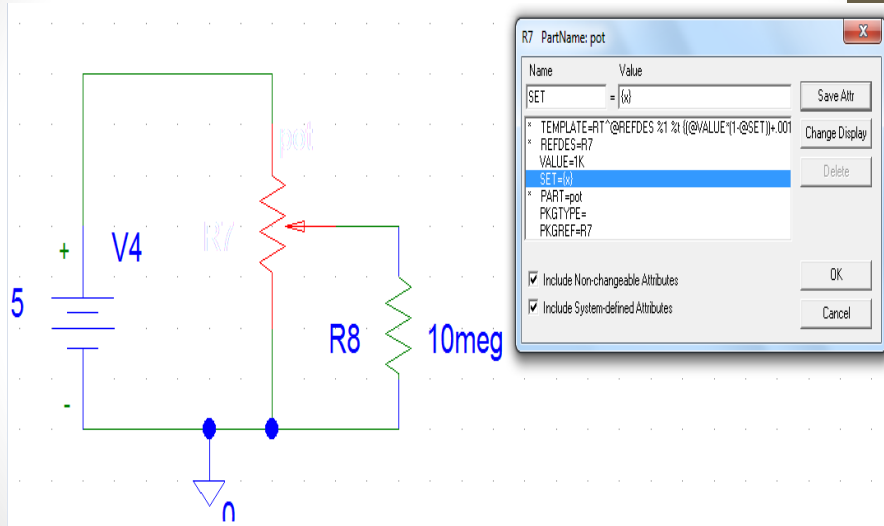
Click on Windows → Copy to clipboard → Change White to Black → Ok. Then you can Paste the output in your file in a clear view.



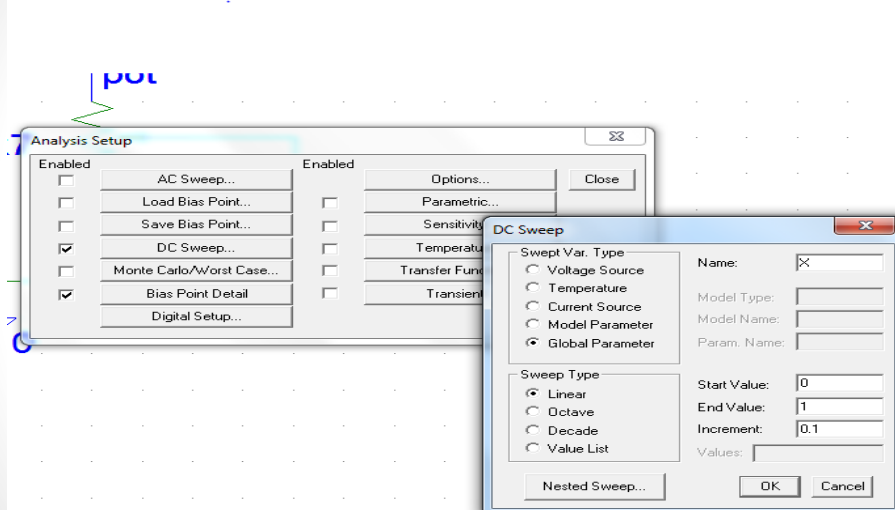
3-DC Sweep: this is used to see the change of output versus a change in one parameter of the circuit “Parameter settings”.



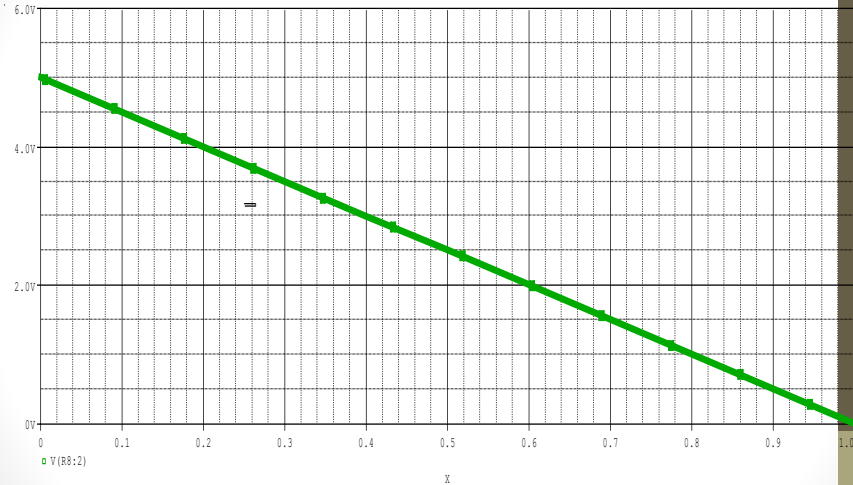
3-DC Sweep: this is used to see the change of output versus a change in one parameter of the circuit "Component settings".



3-DC Sweep: this is used to see the change of output versus a change in one parameter of the circuit "analysis setup".

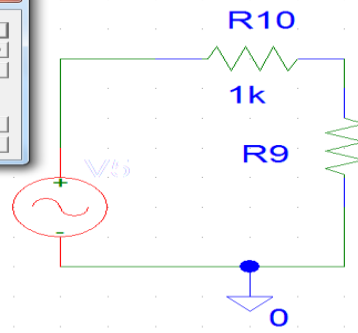
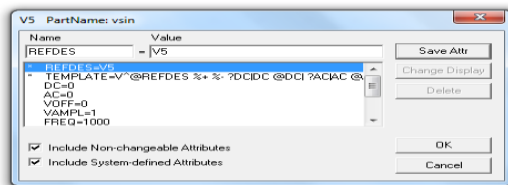


## The output



## 4-Transient: this is used to see the output response in the time domain.

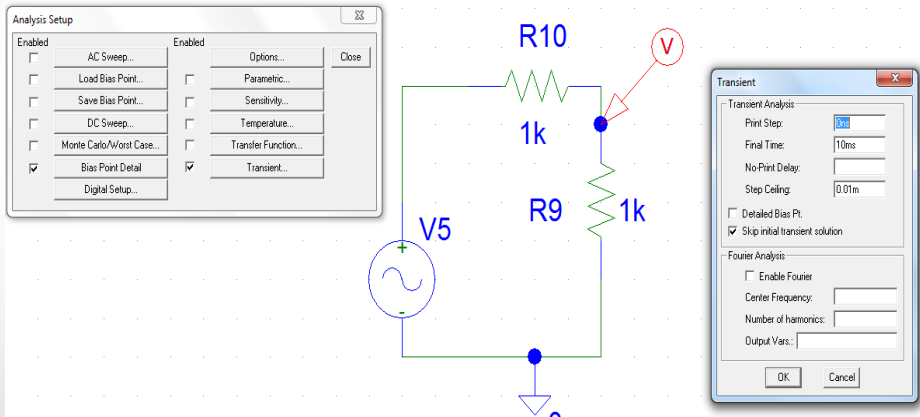
- To have a sine source you have to choose Vsin its settings are as shown below:



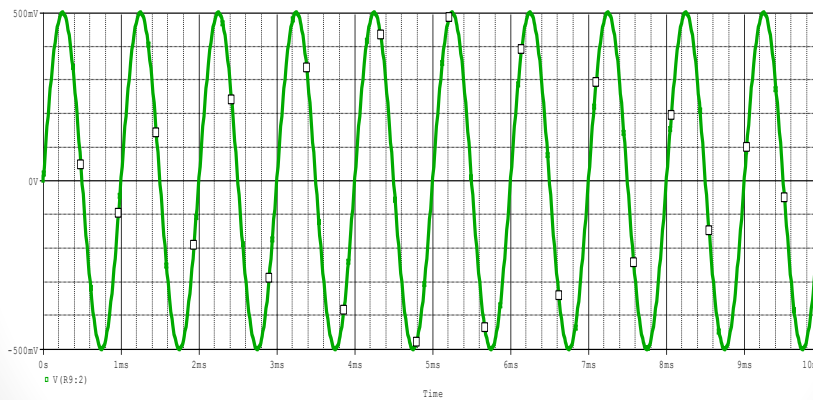


## 4-Transient:

- Then the simulation setup configuration should be as below:

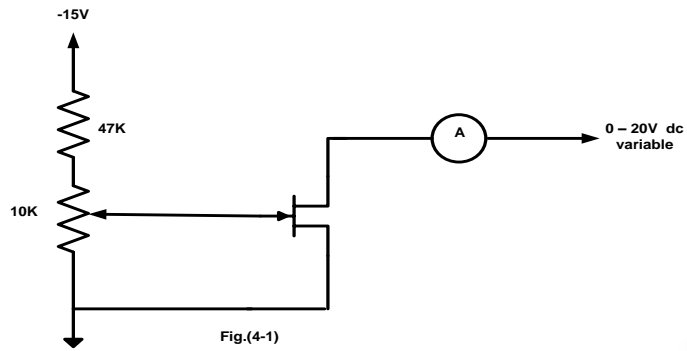


And the output will look like this:



5-Parametric: this type of simulation used along with other type like DC sweep, AC Sweep or Transient. It is used to plot more than one plot on the same graph.

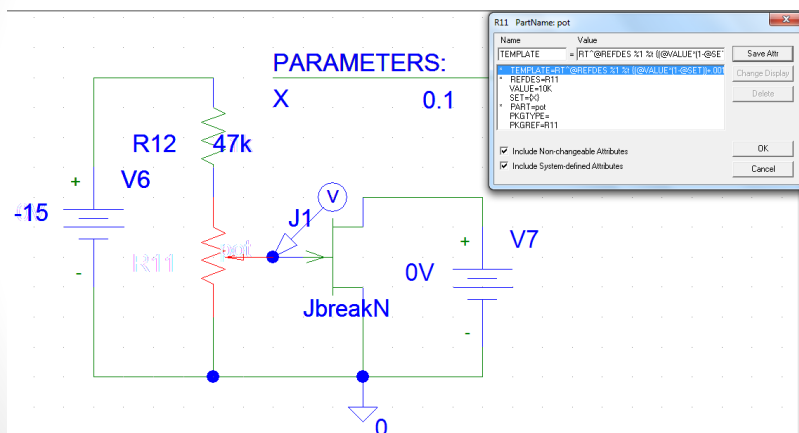
- Example:



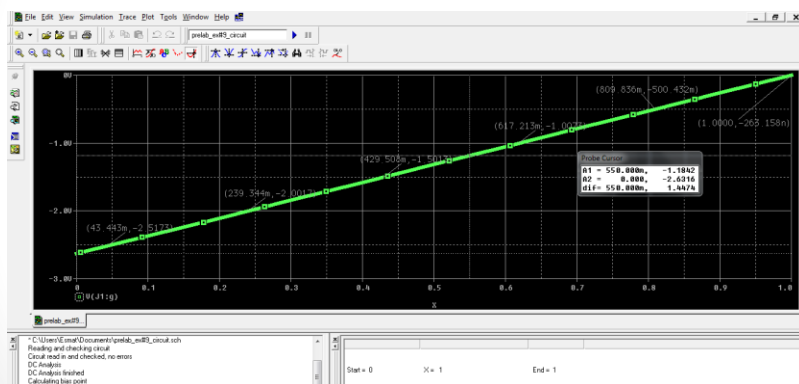
## Example Cont.

	$I_D$ (mA) for $V_{DS}=(V)$						
$V_{GS}(V)$	0	0.5	1	2	5	10	15
0							
-0.5							
-1.0							
-1.5							
-2.0							
-2.5							

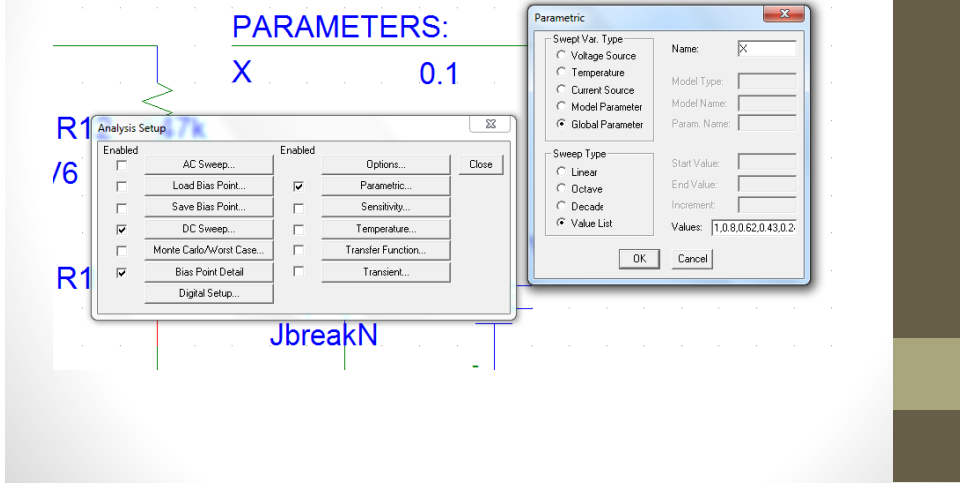
# Adjusting the $V_{GS}$ v.s set



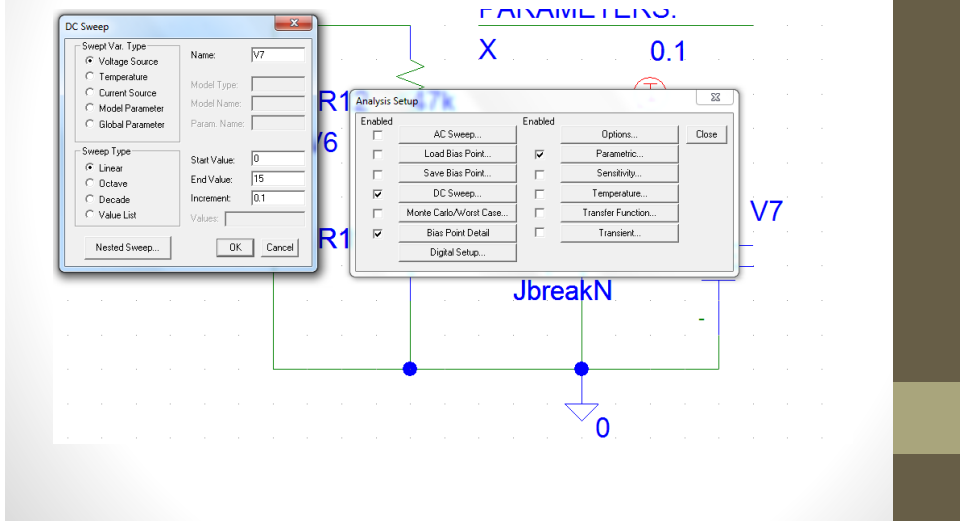
# $V_{GS}$ v.s Set



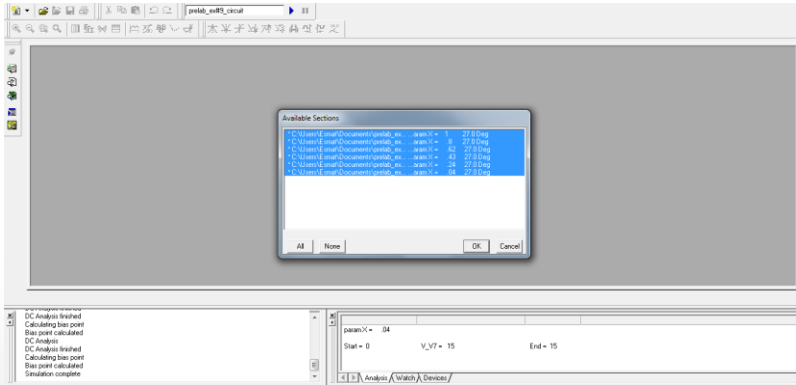
# Parametric Sweep With DC sweep to plot the characteristic curves of the JFET



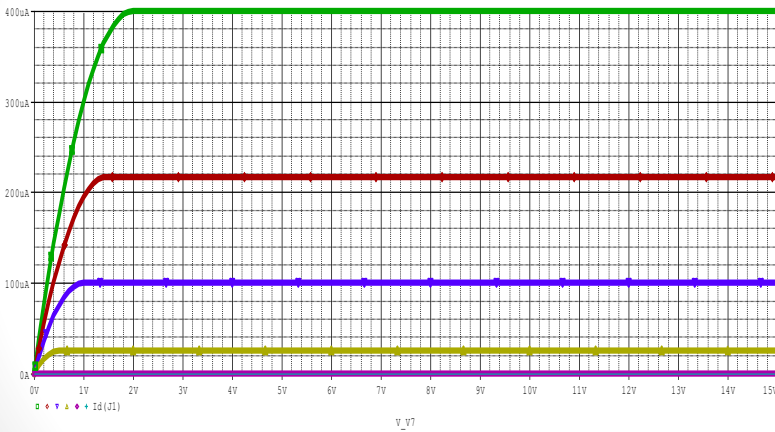
# Parametric Sweep With DC sweep to plot the characteristic curves of the JFET



# Output



# output



**Best Regards**