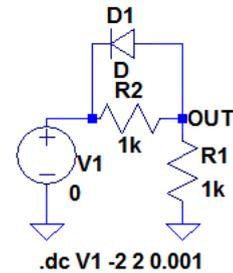
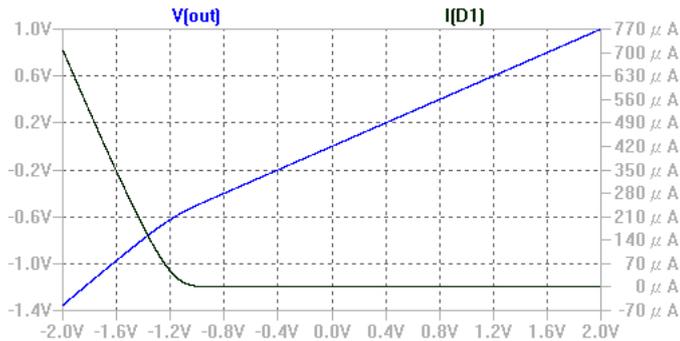


## LTspice worksheet V

1. LTspice is very helpful in analysis of the transfer curve of a resistor-diode circuit.
2. For example, the circuit in page 16, chap. 3 PPT file, can be simulated as follows.
3. Here we show the schematic and the transfer curve from the DC sweep simulation. The default diode is used. You can easily find the default parameters of a diode model on the internet. The slope of the transfer curve can be found by  $d(V(\text{OUT}))$  plot.



4. The region where D1 is ON can be easily identified by the  $I(D1)$  curve.
5. Upload your file to the iLearning platform  
Please put everything you need to present in a Word and convert to a PDF file.  
Please email the **pdf file** only. The size of the file should be less than 2M. The file name should be "Group?-Date", (ex. Group12-20180419). Please also mark the members who are absent.

### In-class group project V (20180419)

1. Simulate the transfer curve for the following circuit.  
Plot  $I(D1)$  and  $I(D2)$  in the same plot. Find the region where D1 or D2 is turned ON.
2. Find the slope of the transfer curve in each region.

