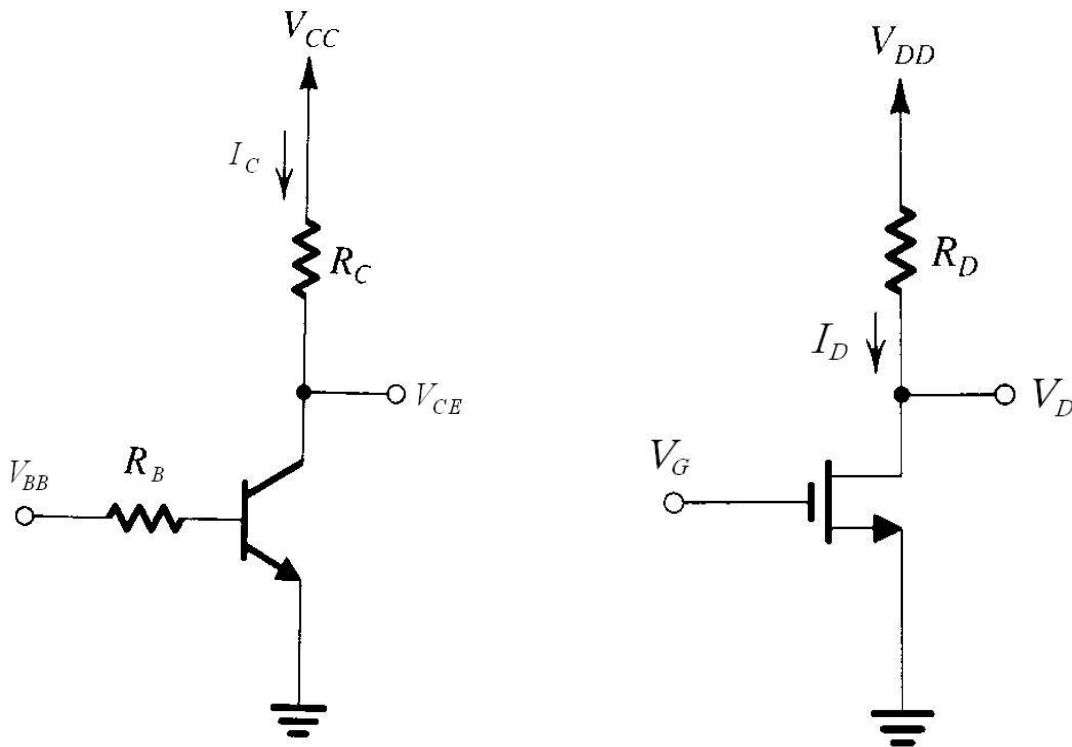


Project Description

ECE 340
Summer 2004
Due 8/5/04

Use SGFramework to analyze a BJT and MOSFET inverter and compare the simulation results to that of a load line analysis.

The required files for the simulation are embjt01.sg and mos1.sg located at ~siwaporn/SGF/examples/ch08/embjt01 and ~siwaporn/SGF/examples/ch10/mos1 respectively. Here are the circuits:



After running the simulation, plot V_{BB} vs. V_{CE} for the BJT and V_G vs. V_D for the MOSFET using MATLAB or another graphing software. Take points from the load-line analysis and plot these on the same graph. Necessary parameters (V_{CC} , V_{DD} , etc.) to solve the load-line can be found in the sg files. Just open them with a text viewer. Hand in these graphs and the load line analysis including all steps and equations clearly showing your results.