Educational package for PSM projects

Installation

1. Install Linear Technology "LTspice" (Schematic Editor and Simulator)

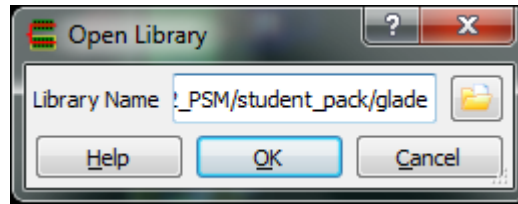   1.1 Download the executable setup program LTSpiceIV.exe from:
       http://www.linear.com/designtools/software/#LTspice

2. Install Glade Layout Editor:

   2.1 Download the compressed glade tree from http://www.peardrop.co.uk/, choosing the
       correct version for the operating system in use.
   2.2 Unzip the downloaded file into an empty directory.
       A sub-dir named "glade4_win32" or "glade4_win64" should be created. The
       glade executable (glade.exe) is located into this directory.
   2.3 Run the vcredist_x64 application, to install the VC++ 2013 redistributables.
   2.4 Launch glade (no set-up is required, simply execute the glade.exe executable) to check
       that the installation is complete.
   2.5 Note: do not follow the README.txt instructions included into the glade directory,
        since most operation are already performed by a script of the Design Kit. (see next section).

3. Download the minimal design kit (created by the teacher) and customize it

   3.1. Download the .zip work directory (psm_work.zip)
   3.2 Uncompress it into a known location. Two sub-dirs "LTSpice" and "glade" should have
        been created.
   3.3 Get into LTSpice dir and test whether LTSpice is correctly installed by clicking (twice)
        on work_bench.asc. LTSpice should start and open schematic diagram with a single
        subcircuit and two voltage sources. Launch simulate->run and a dc-sweep simulation shoud
        be executed with no errors.
   3.4 Set-up the glade environment by entering the sub.dir glade (it is inside "psm_work"). Right
        click on the file "layout.bat" and choose "modify", The batch file should be opened by
        a text editor (typically notepad.exe).
   3.5 Modify the line where the
        "set GLADE_HOME=C:\Program Files\glade4_win64" line appear, by substituting your
        actual path to the glade install directory. Note that lines beginning with "rem" are
        comments.
   3.6 Test glade by executing the layout.bat batch file. Glade should open normally. After that,
        open the example library by the menu command: file->Open Lib. A dialog window should
        open like that shown in the figure:

Click on the directory icon on the right to choose the library. Navigate up to your psm_work\glade directory and then select the "psm" directory.
Note that a library is a directory. After selecting the library, press OK in the original window. The library psm should be added on the left window of the glade program. Expand the psm library and check if a cell (inverter) with a view (layout) is present and shows regularly