

LAB 0: Familiarize with DC shell.

- Copy the lab directory to you home directory and go to the new directory:

```
% cp -r <carpeta_de_referencia>/FE/LAB0 <carpeta_de_destino>
% cd <carpeta_de_destino>
```

- You can see the Verilog file here:

```
% gedit ./rtl/fulladder.v
```

- Load the synthesis tools and then open a “dc_shell” and source the DC script:

```
% dc_shell
source -echo -verbose ./scripts/dc.tcl
```

- Try out the command line help to check available commands:

```
help report*
help get*
```

- Check the documentation of some commands:

```
man report_timing
man report_qor
man compile_ultra
```

- Try out some of the commands mentioned during the course or demo sessions:

```
get_designs
get_libs
report_lib <lib_name>
get_attribute <lib_name> time_unit_name
get_ports
all_inputs
all_outputs
get_cells
report_cell <cell_name>
report_cell [get_cells -hier *C2*]
```

- Save a report into an ASCII file:

```
report_cell [get_cells -hier *C2*] > reports/report_cells.rpt
```

- Open the GUI (called “Design Vision”) and review the design:

```
start_gui
```

- In the window “Logical Hierarchy” you can see the “fulladder” design. Right-Click gives you some options. Select “Schematic View” and with double-click over the showed symbol you can see the inside of the design.

- Close the GUI window and then exit from the “dc_shell”:

```
exit
```

- Check the report created during the session:

```
% gedit ./reports/report_cells.rpt
```

TIP: “shell” commands can be executed from the “dc_shell” doing “sh <command>”.