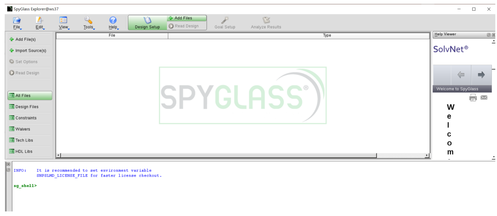
Spyglass

Graphical User Interface (GUI)

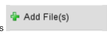
Start Spyglass GUI

execute the following command

```
$ spyglass &
```



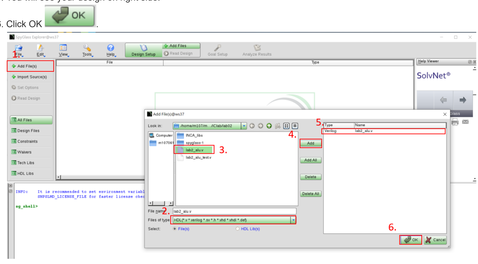
Import Design

1. Click Add Files 

.
2. Change Files of type to HDL(*.v).
3. Select your own verilog code .
(Note that we don't select testbench since we won't synthesize it in our design.)
4. Click Add 

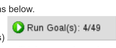
.
5. You will see your design on right side.
6. Click OK 

.

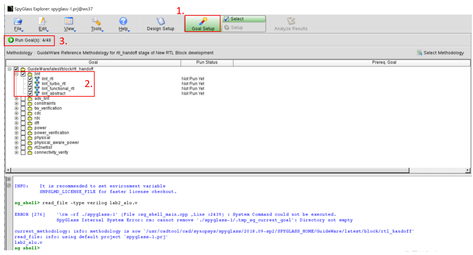


Goal Setup

1. Click Goal Setup 

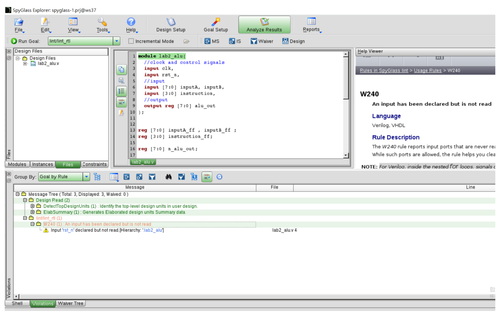
.
2. Set the options as below.
3. Click Run Goal(s) 

.
(Note that this step will take you a few minutes to run all the selected goals.)



Analyze Results

After running the lint check , you can see the analyze results of your design. Check what they means and try to solve all errors and warnings listed as possible.



You can check the detail report in project directory . For example , if you want to see report of lint_rtl：

```
$ cd spyglass-1/lint/lint_rtl/spyglass_reports/
$ gedit moresimple.rpt &
```

For lint_turbo_rtl , you need to change you path to the following path：

```
$ cd spyglass-1/lint/lint_turbo_rtl/spyglass_reports/
$ gedit moresimple.rpt &
```

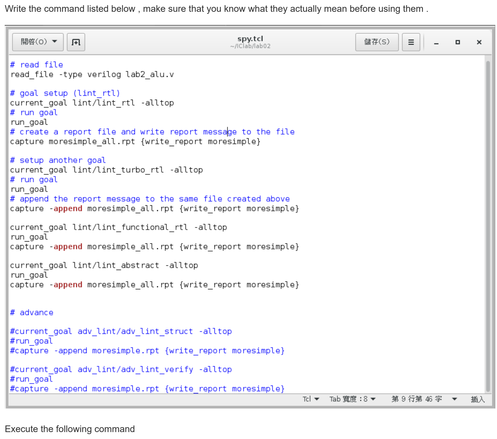
Tcl Shell Interface

In general , we will use script written in tool command language (tcl) to run the CAD tool for convenience .
In this part we will introduce the basic script for Spyglass to achieve the same goal.

Writing your own script

```
$ gedit spy.tcl &
```

Write the command listed below , make sure that you know what they actually mean before using them .



```
# read file
read_file -type verilog lab2_alu.v

# goal setup (lint_rtl)
current_goal lint/lint_rtl -alltop
# run goal
run_goal
# create a report file and write report message to the file
capture moresimple_all.rpt {write_report moresimple}

# setup another goal
current_goal lint/lint_turbo_rtl -alltop
# run goal
run_goal
# append the report message to the same file created above
capture -append moresimple_all.rpt {write_report moresimple}

current_goal lint/lint_functional_rtl -alltop
run_goal
capture -append moresimple_all.rpt {write_report moresimple}

current_goal lint/lint_abstract -alltop
run_goal
capture -append moresimple_all.rpt {write_report moresimple}


# advance

#current_goal adv_lint/adv_lint_struct -alltop
#run_goal
#capture -append moresimple.rpt {write_report moresimple}

#current_goal adv_lint/adv_lint_verify -alltop
#run_goal
#capture -append moresimple.rpt {write_report moresimple}
```

Execute the following command

```
$ sg_shell < spy.tcl
```

Check report massage

Since we have generated all report massage in one file , you can just check them in the following file：

```
$ gedit moresimple_all.rpt &
```

You can also see detail report in the path we mentioned above .