Chapter 04 - OpenROAD first run - TRAINING - Common

Course authors (Git file)

1. Start the first run

EDA tools

- One of the options of chapter 0 (preparations) is needed.
- Navigate to the /flow folder

Enable the design in the Makefile

- Edit the Makefile:
  - Uncomment the line with your choosen DESIGN_CONFIG from ihp-sg13g2. For example the gcd design:

    ```
    1  DESIGN_CONFIG=./designs/ihp-sg13g2/gcd/config.mk
    ```

  - Re-comment the previous uncommented line with DESIGN_CONFIG. For example the gcd on SKY130 design:

    ```
    1  # DESIGN_CONFIG=./designs/asap7/gcd/config.mk
    ```

  - The line with the default design does not need to be commented. This only applies when no previous line with DESIGN_CONFIG is set.

Run the flowscript

- Run make from inside the /flow folder.

Success

- The choosen design should finish after a while and a lot of console output with a table (time/memory) like this:

```
 1  Log                                  Elapsed seconds  Peak Memory/MB
 2  1_1_yosys                                          0              24
 3  1_1_yosys_canonicalize                             0              17
 4  1_1_yosys_hier_report                              0              12
 5  2_1_floorplan                                      0             110
 6  2_2_floorplan_io                                   0             106
 7  2_3_floorplan_tdms                                 0              98
 8  2_4_floorplan_macro                                0             106
 9  2_5_floorplan_tapcell                              0             105
10  2_6_floorplan_pdn                                  0             108
11  3_1_place_gp_skip_io                               0             108
12  3_2_place_iop                                      0             107
13  3_3_place_gp                                       0             320
```