

B2 - Synthesis Pool

B-SYN-200

automakefile

automake-like, but way better





automakefile

binary name: skip-synthesis.sh, automakefile
language: bash



- The totality of your source files, except all useless files (binary, temp files, obj files,...), must be included in your delivery.
- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.
- Error messages have to be written on the error output, and the program should then exit with the 84 error code (0 if there is no error).

REQUIREMENT

Write a shell script named **skip-synthesis.sh** that will both read the output of the command `ls -l`, and print the user and the name of the files starting with the string given as parameter.

```
Terminal
~/B-SYN-200> ls -l | ./skip-synthesis.sh "to"
Zeus          totoTest
Zeus          tomatoKetchup
pierre.perret toutToutTout
Stallman      torus4d
```



The rest of the project will not be corrected unless this requirement is fully functional (and rewritten).



The file must be placed at the root of your git repository.



MAKEFILE GENERATION

Write a shell script named **automakefile**, that generates a nice Makefile given a configuration file. This configuration file can contain the following (potentially unordered) lines:

- source_filename;dependence1 dependence2...
(specify the full names of the files, from the header subfolder below)
- PROJECT_DIR;name_of_the_project_root_folder
- SOURCES_DIR;subfolder_containing_the_source_files
- HEADERS_DIR;subfolder_containing_the_header_files
- LIBS_DIR;subfolder_containing_libraries
- EXEC;executable_name
- CC;compiler_binary
- CFLAGS;compilation_flag1 compilation_flag1...
- LDFLAGS;linking_flag1 linking_flag2...



The generated Makefile must contain at least the classic clean, fclean and re rules.



PROJECT_DIR is the only mandatory line, along with at least one source file.



VERSION MANAGER

Add the following rules to the generated Makefile:

archive

backup the source files in a compressed format, in the project folder

revert

recreate the project from last backup

num

print the current version number

delete

delete last backup



While archiving, the message `xxx file generated.\n` must be printed, `xxx` being the name of the archive.

5 more fields will be necessary in your configuration file :

- BCK_DIR;name_of_the_backup_folder
- ZIP;compression_binary
- ZIPFLAGS;compression_options
- UNZIP;decompression_binary
- UNZIPFLAGS;decompression_options



EXAMPLE

```
Terminal
~/B-SYN-200> ls .
automakefile      fakeProj/
~/B-SYN-200> ls -R fakeProj/
fakeProj/:
calc.c
main.c
config

fakeProj/include:
calc/
fakeProj.h

fakeProj/include/calc:
calc.h

fakeProj/libs/:

fakeProj_backUp/:
```

```
Terminal
~/B-SYN-200> ./automakefile fakeProj/config && ls fakeProj/
calc.c
main.c
config
Makefile
```