DevOrSysAdminScripts

Laurent Lyaudet https://lyaudet.eu/laurent/ laurent.lyaudet@gmail.com

May 16, 2024

Abstract

Some "small" useful scripts for enhancing development or system-administrators tasks

Current version: 2024-05-16 Current number of commits: 76

Current git SHA1: cb7f491bddd77fa4aee2f7c095c4320d35dfaff4 Code lines: 3309 total lines, 2932 not empty lines, 377 empty lines.

1 Files tree

```
- build_and_checks_dependencies
  — build_and_checks.sh.tpl
    - build_md_from_printable_md.sh
    - check_shell_scripts_beginning.sh
    - check_URLs.sh
    common_build_and_checks.sh
    - common_build_and_checks.sh.tpl
    - comparisons.sh
    - create_PDF.sh
    - generate_from_template.sh
    - get_common_text_glob_patterns.sh
     licenses_templates
       — build_license_templates.sh
        - license_file_header_GPLv3+.c.tpl
        - license_file_header_GPLv3+.py.tpl
       — license file header GPLv3+.sh.tpl
       — license_file_header_GPLv3+.tex.tpl
        - license_file_header_GPLv3+.tpl
        - license_file_header_LGPLv3+.c
        - license_file_header_LGPLv3+.c.tpl
```

```
— license_file_header_LGPLv3+.py
         — license_file_header_LGPLv3+.py.tpl
          - license_file_header_LGPLv3+.sh
         — license_file_header_LGPLv3+.sh.tpl
        — license_file_header_LGPLv3+.tex
         — license_file_header_LGPLv3+.tex.tpl
       license_file_header_LGPLv3+.tpl
    — lines_counts.sh
     — lines filters.sh
     - overwrite_if_not_equal.sh
      python_black_complement.sh
    — python_isort_complement.sh
      - too_long_code_lines.sh
   update_common_build_and_checks.sh
  build_and_checks.sh
 — COPYING
 - COPYING.LESSER
  - DevOrSysAdminScripts.html
 — DevOrSysAdminScripts.pdf
 - git_checks.sh
 — latex
     — DevOrSysAdminScripts.tex
   DevOrSysAdminScripts.tex.tpl
 — LiensUtiles.txt
 -- pre-commit
  - README.md
 - README.md.tpl
  repository_data.txt
 - wget_sha512.sh
4 directories, 46 files
[ 12K May 16 11:42] ./
— [4.0K May 16 11:42] build_and_checks_dependencies/
     — [1.4K May 16 03:01] build_and_checks.sh.tpl*
    -- [1.7K May 16 03:58] build_md_from_printable_md.sh*
     - [1.0K May 16 02:41] check_shell_scripts_beginning.sh
     — [1.8K May 16 02:42] check_URLs.sh
     - [7.5K May 16 11:42] common_build_and_checks.sh*
     - [5.1K May 16 03:37] common_build_and_checks.sh.tpl
     — [2.8K May 16 02:28] comparisons.sh
    — [6.5K May 16 02:42] create_PDF.sh*
      - [1.3K May 16 02:42] generate_from_template.sh
     — [1.7K May 16 02:42] get_common_text_glob_patterns.sh
      - [4.0K May 16 11:42] licenses_templates/
      [4.9K May 16 11:41] build_license_templates.sh*
```

```
[ 713 May 14 23:15] license_file_header_GPLv3+.c.tpl
         [ 715 May 14 23:19] license_file_header_GPLv3+.py.tpl
         [ 747 May 15 18:15] license_file_header_GPLv3+.sh.tpl
         [ 747 May 15 18:15] license_file_header_GPLv3+.tex.tpl
         - [ 707 May 14 23:23] license_file_header_GPLv3+.tpl
         - [ 782 May 15 17:06] license_file_header_LGPLv3+.c
         - [ 734 May 14 23:20] license_file_header_LGPLv3+.c.tpl
            784 May 15 17:06] license_file_header_LGPLv3+.py
         - [ 736 May 14 23:20] license_file_header_LGPLv3+.py.tpl
         - [ 816 May 15 18:15] license_file_header_LGPLv3+.sh
         - [ 768 May 15 18:15] license_file_header_LGPLv3+.sh.tpl
        - [ 816 May 15 18:15] license_file_header_LGPLv3+.tex
         - [ 768 May 16 03:40] license_file_header_LGPLv3+.tex.tpl
       — [ 728 May 14 23:24] license_file_header_LGPLv3+.tpl
     - [1.7K May 16 02:42] lines_counts.sh
     - [5.2K May 16 02:43]
                           lines filters.sh
     - [1.1K May 16 02:43] overwrite_if_not_equal.sh
     - [1.3K May 16 02:43] python_black_complement.sh
     - [1.3K May 16 02:43] python_isort_complement.sh
     - [1.2K May 16 02:43] too_long_code_lines.sh
    - [2.4K May 16 03:10] update_common_build_and_checks.sh*
 - [1.6K May 16 11:42]
                     build_and_checks.sh*
 - [ 34K May 6 00:49] COPYING
- [7.5K May 6 00:49] COPYING.LESSER
 - [ 15K May 14 18:40] DevOrSysAdminScripts.html
 - [140K May 16 04:02] DevOrSysAdminScripts.pdf
 - [2.2K May 16 02:44] git_checks.sh
- [4.0K May 16 11:42] latex/
    — [ 13K May 16 11:42] DevOrSysAdminScripts.tex
  [ 13K May 16 03:33] DevOrSysAdminScripts.tex.tpl
— [ 424 May 6 00:49] LiensUtiles.txt
- [1.1K May 16 02:44] pre-commit
 - [1.6K May 16 03:53] README.md
 - [1.6K May 15 18:00] README.md.tpl
 - [ 538 May 14 23:04] repository_data.txt
- [1.1K May 16 02:45] wget_sha512.sh
```

4 directories, 46 files

2 Listing of files

The following source code is covered by LGPLv3+. The text of the license is available at: https://www.gnu.org/licenses/. The git repository of this source code is also available at: https://github.com/LLyaudet/DevOrSysAdminScripts/.

2.1 build_and_checks_dependencies/build_and_checks.sh.tpl

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  source ./wget_sha512.sh
  mkdir -p build_and_checks_dependencies/licenses_templates
  subdir="build_and_checks_dependencies"
 personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build and checks dependencies"
  URL_beginning="$personal_github$dependencies"
  script="$URL_beginning/common_build_and_checks.sh"
  @sha512_common_build_and_checks.sh@
  wget_sha512 "./$subdir/common_build_and_checks.sh" "$script"\
    "$correct sha512"
  chmod +x "./$subdir/common_build_and_checks.sh"
  cwd="."
  if [[ -n "$1" ]];
42 then
    cwd="$1"
 fi
```

2.2 build_and_checks_dependencies/build_md_from_printable_md.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  subdir="build and checks dependencies"
  source "./$subdir/overwrite_if_not_equal.sh"
28 sed_expression='s/(\[[a-zA-Z0-9:-]*\]: [^\n\\]*)\\\n/\1/Mg'
29 sed_expression+=';s/(<http[^\n\\]*)\\n/\1/Mg'</pre>
  sed_expression+='; s/(- < http[^\n\\]*)\\n/\1/Mg'
32 pushd.
33 if [[ -n "$1" ]];
  then
     cd "$1"
  fi
  if [[ -n "$2" ]];
39 then
    filename="$2"
41 else
```

```
filename="README"
fi
if [[ -f "${filename}.md.tpl" ]];
  sed -Ez "$sed_expression" "${filename}.md.tpl"\
    > "${filename}_temp1.md"
  sed -Ez "$sed_expression" "${filename}_temp1.md"\
    > "${filename} temp2.md"
  sed -Ez "$sed_expression" "${filename}_temp2.md"\
    > "${filename}_temp3.md"
  sed -Ez "$sed_expression" "${filename}_temp3.md"\
    > "${filename}_temp4.md"
  overwrite if not equal "${filename}.md" "${filename} temp4.md"
  rm "${filename}_temp1.md" "${filename}_temp2.md"\
    "${filename} temp3.md"
else
  echo "No file ${filename}.md.tpl"
fi
popd
```

2.3 build_and_checks_dependencies/check_shell_scripts_beginning.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
# along with DevOrSysAdminScripts.
# If not, see <https://www.gnu.org/licenses/>.
```

```
# @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet

check_one_shell_script_beginning() {
    diff <(head -n 1 "$1") <(echo '#!/usr/bin/env bash')
}

check_shell_scripts_beginning() {
    shopt -s globstar
    for i in **/*.sh; do
        check_one_shell_script_beginning "$i"

done

}
```

2.4 build_and_checks_dependencies/check_URLs.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
# along with DevOrSysAdminScripts.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
# ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
subdir="build_and_checks_dependencies"
source "./$subdir/get_common_text_glob_patterns.sh"
check_URLs() {
   get_common_text_files_glob_patterns
```

```
declare -A substitutions
  substitutions=(\
    ["http://www.gnu.org/licenses/"]="https://www.gnu.org/licenses/"
  for pattern in "${common_file_patterns[@]}"; do
    [ "$1" != "-v" ] || echo "Iterating on pattern: $pattern"
    find . -type f -name "$pattern" -printf '%P\n'\
      | xargs grep -H 'http:'\
      | grep -v "^[^:]*check_URLs.sh:"
    for filename in $pattern; do
      [ -f "$filename" ] || continue
      base_filename=$(basename "$filename")
      [ "$base filename" != "check URLs.sh" ] || continue
      [ "$1" != "-v" ] || echo "Handling the file: $filename"
      for substitution in "${!substitutions[@]}"; do
        substitution2=${substitutions[$substitution]}
        if grep -q "$substitution" "$filename"; then
          sed -i "s|$substitution|$substitution2|g" "$filename"
      done
    done
  done
}
```

2.5 build_and_checks_dependencies/common_build_and_checks.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
```

```
# along with DevOrSysAdminScripts.
   # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
22
   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24
  source ./wget_sha512.sh
  personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build and checks dependencies"
  URL beginning="$personal github$dependencies"
  subdir="build_and_checks_dependencies"
32
  script="$URL beginning/build md from printable md.sh"
  correct sha512='f443133905731f4d5f8b844b10fdb4eb909ef8127cc11009c8c5e'
  correct sha512+='9dc3e42754f244f3ef829d22d562abdffebb75acc692c3b21874'
  correct_sha512+='eb421a375d6a9049406494b'
  wget_sha512 "./$subdir/build_md_from_printable_md.sh" "$script"\
     "$correct_sha512"
  chmod +x "./$subdir/build md from printable md.sh"
  script="$URL_beginning/check_shell_scripts_beginning.sh"
  correct_sha512='312ea7604694b2b0c0e96ecfb8896571f8ddad3bac071e7483d78'
  correct sha512+='6f44ba1781c007819024ece389ef11e7da9a330ca61f222dea19'
  correct_sha512+='f5326d9a3b3710056a903b6'
  wget sha512 "./$subdir/check shell scripts beginning.sh" "$script"
     "$correct sha512"
  script="$URL beginning/check URLs.sh"
  correct sha512='91e6297e954bfe6b6bc60c5ed81b1d1dcc5ee9b95b185f83baff9'
  correct sha512+='f16ac2f8059873c8dbfbec17cc1cca029e38595dbcc656bea815'
  correct sha512+='b8994fdb25a8c5beae765cc'
  wget sha512 "./$subdir/check URLs.sh" "$script" "$correct sha512"
  script="$URL_beginning/comparisons.sh"
  correct_sha512='eda1cdad71ef71db542a6bb7f6a0fdc4b3ab5cb4cb90eb44955f3'
  correct_sha512+='8fc750d43da63bd25e3ee27f7b1acd4da355d6e8ea133cea75f7'
  correct_sha512+='ff9d30b0a8f72cc565696c9'
  wget sha512 "./$subdir/comparisons.sh" "$script" "$correct sha512"
  script="$URL_beginning/create_PDF.sh"
  correct_sha512='3640c97ca929cfc50d3d753bd3da29301fe365f9508a449847073'
  correct sha512+='74712c48607e040cc8bd80f41108d31e79b03ee4026c87d48f63'
  correct_sha512+='d84462cb205fa905e1b4d83'
  wget sha512 "./$subdir/create PDF.sh" "$script" "$correct sha512"
  chmod +x "./$subdir/create PDF.sh"
```

```
66
   script="$URL_beginning/generate_from_template.sh"
   correct sha512='cefb11d2446a7ec18badae3ade3008ba2776dc7af35dae0c753b0'
   correct sha512+='e47fd92e81b15fd10a3e56ae58f043f05924085538d181a49b46'
   correct sha512+='fd8ac50bd50a126a264e14a'
   wget_sha512 "./$subdir/generate_from_template.sh" "$script"\
     "$correct sha512"
   script="$URL_beginning/get_common_text_glob_patterns.sh"
   correct sha512='cd341e8fd1074d53f6ea88b332fc4375f06af0e4c0b56e1ddb39c'
   correct sha512+='8ab988ea5f0c21ec4088fe1946ae44f3ea7ba394f558c03a446f'
   correct sha512+='0971482a4a7a8d6fe041153'
   wget_sha512 "./$subdir/get_common_text_glob_patterns.sh" "$script"\
     "$correct sha512"
   URL beginning2="$URL beginning/licenses templates"
   subdir2="$subdir/licenses templates"
   script="$URL_beginning2/build_license_templates.sh"
  correct_sha512='5de90f12af0b77ee6771ec4f827f6a1f36883b3ceb5c3b76806de'
   correct_sha512+='7d187059e79a8b6fd94b659195abd4b7d91826afbb257a8f6db4'
   correct sha512+='291276a2df0000ab01e6daf'
   wget sha512 "./$subdir2/build license templates.sh" "$script"
     "$correct_sha512"
   chmod +x "./$subdir2/build_license_templates.sh"
   script="$URL beginning2/license file header GPLv3+.tpl"
   correct sha512='2bdef9a729a5a9ca5ed87ef8a518877c5ee6b31b4533608660316'
   correct sha512+='a4e595fb31465a4847f4d53a2f7264118bd4eab7c1d1892e00bc'
   correct sha512+='1861455ed02898f194db067'
   wget sha512 "./$subdir2/license file header GPLv3+.tpl" "$script"\
     "$correct sha512"
   script="$URL beginning2/license file header LGPLv3+.tpl"
   correct sha512='265fd0d086b48ab798f35a072335a4976e4eda8c256febba6c77c'
   correct_sha512+='98ca86cdd844c6ac150c3445c80debbb3fc2574b5fceeeaf79ec'
100
   correct_sha512+='734a759bdef5fe798067c62'
   wget_sha512 "./$subdir2/license_file_header_LGPLv3+.tpl" "$script"\
102
     "$correct sha512"
104
   script="$URL_beginning/lines_counts.sh"
   correct sha512='cc58b84da70ad2c6adfa8c421e58bfc1b410e2508e8b28ece29db'
   correct sha512+='ab13405379aa2e0e586be741f3c785147c1bfc486e2be07ba0f7'
   correct sha512+='e0d63193e14482949cecaed'
   wget sha512 "./$subdir/lines counts.sh" "$script" "$correct sha512"
110
   script="$URL_beginning/lines_filters.sh"
```

```
correct sha512='5c9da4e6b8910256dd412effdfc3303e025634d4a650e710741b5'
   correct sha512+='0f43871a3464cdd4935fa52ee756f9848192fb3e95e9a2d17e54'
   correct sha512+='69ae594c96a1597be1044c5'
   wget sha512 "./$subdir/lines filters.sh" "$script" "$correct sha512"
116
   script="$URL_beginning/overwrite_if_not_equal.sh"
   correct sha512='66cf1352946f96106206de7b1b71a42c2bf5be4b5636929c64e10'
118
   correct_sha512+='88db7261872aa57057630a92ae51461528f2a2f61fe3da52a549'
   correct sha512+='db8f9febb542fe6b22f51dd'
   wget sha512 "./$subdir/overwrite if not equal.sh" "$script"\
     "$correct sha512"
122
   script="$URL_beginning/python_black_complement.sh"
   correct sha512='7152e9d01cc3c72371695635cd6866b2e13ce25f4842afb8e4e87'
   correct sha512+='b6447b26abafbdbc850f69946913b5b2c423b265c9066a2b4655'
   correct sha512+='6dea19c04a5416588423a74'
   wget_sha512 "./$subdir/python_black_complement.sh" "$script"\
     "$correct_sha512"
129
   script="$URL_beginning/python_isort_complement.sh"
   correct_sha512='ca3d5f7547e97c302845d772c4c7079d55ec3f98482cc620ef417'
   correct sha512+='b5b85720067b27252fea8c7ddade226d97ee7bc7f8575c7ff8f0'
133
   correct sha512+='5dcc20672f0ea9c376a3fd2'
   wget sha512 "./$subdir/python isort complement.sh" "$script"\
     "$correct_sha512"
137
   script="$URL beginning/too long code lines.sh"
   correct sha512='865abda5d73f84bc8f660ac165ce71d69ba96423ffee14399662c'
   correct sha512+='2bc1dd69fafa421327ae9d9a61b1d17c2b8619e0a606db7dc0d6'
   correct sha512+='fad475096828bf339075f09'
   wget sha512 "./$subdir/too long code lines.sh" "$script"\
     "$correct sha512"
143
144
   shopt -s globstar
145
   source "./$subdir/check_shell_scripts_beginning.sh"
  source "./$subdir/check_URLs.sh"
  source "./$subdir/comparisons.sh"
148
   source "./$subdir/generate_from_template.sh"
   source "./$subdir/get common text glob patterns.sh"
  source "./$subdir/lines_counts.sh"
  source "./$subdir/lines filters.sh"
  source "./$subdir/overwrite_if_not_equal.sh"
  source "./$subdir/python black complement.sh"
  source "./$subdir/python isort complement.sh"
   source "./$subdir/too_long_code_lines.sh"
```

```
cwd="."
   if [[ -n "$1" ]];
   then
     cwd="$1"
   fi
162
   echo "Building license headers"
164
   ./$subdir2/build_license_templates.sh "$cwd"
165
166
   echo "Building README.md"
   ./$subdir/build_md_from_printable_md.sh "$cwd"
168
   pushd .
   cd "$cwd"
171
   echo "Running isort"
   isort .
   python_isort_complement
175
   echo "Running black"
177
   black .
   python_black_complement
179
   find . -name "pyproject.toml" | relevant_find\
     | while read -r filename;
182
183
     if grep -q "Typing :: Typed" "$filename"; then
       echo "Running mypy"
185
       mypy $(dirname "$filename")
186
     fi
187
   done
188
189
   echo "Analyzing too long lines"
190
   too_long_code_lines | relevant_grep | not_license_grep
191
192
   echo "Analyzing shell scripts beginning"
   check_shell_scripts_beginning | relevant_grep
194
   echo "Analyzing URLs"
196
   check_URLs | relevant_grep
198
   echo "Creating the PDF file of the listing of the source code"
   ./build and checks dependencies/create PDF.sh
200
  popd
202
```

2.6 build_and_checks_dependencies/common_build_and_checks.sh.tpl

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  source ./wget_sha512.sh
  personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build_and_checks_dependencies"
  URL beginning="$personal github$dependencies"
  subdir="build and checks dependencies"
31
  script="$URL_beginning/build_md_from_printable_md.sh"
  @sha512_build_md_from_printable_md.sh@
  wget_sha512 "./$subdir/build_md_from_printable_md.sh" "$script"\
    "$correct_sha512"
  chmod +x "./$subdir/build_md_from_printable_md.sh"
  script="$URL_beginning/check_shell_scripts_beginning.sh"
  @sha512_check_shell_scripts_beginning.sh@
  wget sha512 "./$subdir/check shell scripts beginning.sh" "$script"
    "$correct sha512"
  script="$URL_beginning/check_URLs.sh"
```

```
@sha512_check_URLs.sh@
  wget_sha512 "./$subdir/check_URLs.sh" "$script" "$correct_sha512"
  script="$URL_beginning/comparisons.sh"
  @sha512_comparisons.sh@
  wget_sha512 "./$subdir/comparisons.sh" "$script" "$correct_sha512"
  script="$URL_beginning/create_PDF.sh"
  @sha512 create PDF.sh@
s4 wget sha512 "./$subdir/create PDF.sh" "$script" "$correct sha512"
  chmod +x "./$subdir/create PDF.sh"
 script="$URL_beginning/generate_from_template.sh"
  @sha512 generate from template.sh@
  wget sha512 "./$subdir/generate from template.sh" "$script"\
    "$correct sha512"
  script="$URL_beginning/get_common_text_glob_patterns.sh"
  @sha512_get_common_text_glob_patterns.sh@
  wget_sha512 "./$subdir/get_common_text_glob_patterns.sh" "$script"\
    "$correct sha512"
  URL_beginning2="$URL_beginning/licenses_templates"
  subdir2="$subdir/licenses_templates"
  script="$URL_beginning2/build_license_templates.sh"
  @sha512 build license templates.sh@
  wget_sha512 "./$subdir2/build_license_templates.sh" "$script"\
    "$correct sha512"
  chmod +x "./$subdir2/build_license_templates.sh"
  script="$URL_beginning2/license_file_header_GPLv3+.tpl"
  @sha512 license file header GPLv3+.tpl@
  wget sha512 "./$subdir2/license file header GPLv3+.tpl" "$script"\
    "$correct_sha512"
  script="$URL_beginning2/license_file_header_LGPLv3+.tpl"
  @sha512_license_file_header_LGPLv3+.tpl@
  wget_sha512 "./$subdir2/license_file_header_LGPLv3+.tpl" "$script"\
    "$correct sha512"
  script="$URL_beginning/lines_counts.sh"
  @sha512_lines_counts.sh@
  wget_sha512 "./$subdir/lines_counts.sh" "$script" "$correct_sha512"
  script="$URL beginning/lines filters.sh"
  @sha512_lines_filters.sh@
```

```
wget_sha512 "./$subdir/lines_filters.sh" "$script" "$correct_sha512"
   script="$URL beginning/overwrite if not equal.sh"
   @sha512_overwrite_if_not_equal.sh@
   wget_sha512 "./$subdir/overwrite_if_not_equal.sh" "$script"\
     "$correct_sha512"
   script="$URL_beginning/python_black_complement.sh"
   @sha512 python black complement.sh@
   wget_sha512 "./$subdir/python_black_complement.sh" "$script"\
     "$correct sha512"
101
   script="$URL_beginning/python_isort_complement.sh"
   @sha512 python isort complement.sh@
   wget sha512 "./$subdir/python isort complement.sh" "$script"\
     "$correct sha512"
106
107
   script="$URL_beginning/too_long_code_lines.sh"
108
   @sha512_too_long_code_lines.sh@
   wget_sha512 "./$subdir/too_long_code_lines.sh" "$script"\
110
     "$correct sha512"
112
   shopt -s globstar
   source "./$subdir/check_shell_scripts_beginning.sh"
  source "./$subdir/check_URLs.sh"
  source "./$subdir/comparisons.sh"
  source "./$subdir/generate_from_template.sh"
  source "./$subdir/get_common_text_glob_patterns.sh"
  source "./$subdir/lines counts.sh"
  source "./$subdir/lines filters.sh"
   source "./$subdir/overwrite if not equal.sh"
  source "./$subdir/python black complement.sh"
   source "./$subdir/python isort complement.sh"
   source "./$subdir/too_long_code_lines.sh"
124
  cwd="."
  if [[ -n "$1" ]];
127
   t.hen
     cwd="$1"
129
   fi
131
   echo "Building license headers"
   ./$subdir2/build license templates.sh "$cwd"
133
  echo "Building README.md"
135
   ./$subdir/build_md_from_printable_md.sh "$cwd"
```

```
137
   pushd .
   cd "$cwd"
  echo "Running isort"
  isort .
   python_isort_complement
   echo "Running black"
   black .
   python_black_complement
   find . -name "pyproject.toml" | relevant_find\
   | while read -r filename;
150
   do
151
     if grep -q "Typing :: Typed" "$filename"; then
       echo "Running mypy"
       mypy $(dirname "$filename")
154
     fi
   done
156
   echo "Analyzing too long lines"
158
   too_long_code_lines | relevant_grep | not_license_grep
160
   echo "Analyzing shell scripts beginning"
   check_shell_scripts_beginning | relevant_grep
162
   echo "Analyzing URLs"
   check_URLs | relevant_grep
   echo "Creating the PDF file of the listing of the source code"
   ./build_and_checks_dependencies/create_PDF.sh
169
  popd
170
```

2.7 build_and_checks_dependencies/comparisons.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# This file is part of DevOrSysAdminScripts library.
# # DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
```

```
# DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  equal(){
    # Returns 1 if all the arguments strings are equal.
     # Renvoie 1 dans $? si toutes les chaînes en arguments sont égales.
    # J'ai rerepensé au 3-way-merge
     # et à mon article sur le principe de première différence
     # appliqué à la largeur modulaire, de clique ou de rang avec
     # l'idée d'un principe de première différence ternaire.
     all_args="'$*'"
    current="$all_args"
     for arg in $0; do
       if [[ "$current" == "$all args" ]]; then
35
         current="$arg"
         continue
37
       fi
       if [[ "$current" != "$arg" ]]; then
         return 0
       fi
     done
     return 1
45
  max(){
     # Returns the maximum string among the arguments.
     # Renvoie la chaîne la plus grande parmi celles proposées.
     # $1=$sort command with the flags you want to be applied.
     # $ max sort a b c
     # C
     if [["$\#" == 0]]; then
      return 1
     fi
54
     printf "%s\n" "${@:2}" | eval "$1 -r" | head -1
```

```
}
  min(){
    \# Returns the minimum string among the arguments.
    # Renvoie la chaîne la plus petite parmi celles proposées.
    # $1=$sort command with the flags you want to be applied.
    # $ min sort a b c
    if [["$\#" == 0]]; then
      return 1
    printf "%s\n" "${@:2}" | eval "$1" | head -1
  is_substring(){
    # $1=$string
71
    # $2=$substring
72
    is_substring_var_1=$(\
      echo "$1" | sed -e 's/\\\&/g' -e "s/'\\\\&/g"\
    is_substring_var_2=$(\
      echo "$2" | sed -e 's/\\\^{q'} -e "s/'\\\^{q'}
    is_substring_var_3="\$a = '$is_substring_var_1';"
    is_substring_var_3+=" \$b = preq_quote('$is_substring_var_2');"
    is substring var 3+="\$c = '/'.addcslashes(\$b, '/').'/';"
    is_substring_var_3+=" die(preg_match(\$c, \$a));"
    php -r "$is_substring_var_3"
  }
  is_subfile(){
    # $1=$filename
    # $2=$subfilename
    is_subfile_var_1="\$a = file_get_contents('$1');"
    is_subfile_var_1+=" \$b = preq_quote(file_get_contents('$2'));"
    is_subfile_var_1+=" die(preg_match(\$c, \$a));"
    php -r "$is_subfile_var_1"
  }
```

2.8 build_and_checks_dependencies/create_PDF.sh

```
#!/usr/bin/env bash
this file is part of DevOrSysAdminScripts library.
# This file is part of DevOrSysAdminScripts library.
# # DevOrSysAdminScripts is free software:
```

```
# you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24
  current_path=$(pwd)
  main_directory=$(basename "$current_path")
  subdir="build_and_checks_dependencies"
  source "./$subdir/lines_counts.sh"
  source "./$subdir/lines filters.sh"
  cp "./latex/$main_directory.tex.tpl"\
32
      "./latex/$main_directory.tex"
  # We need a variant of the template with long lines.
   cp "./latex/$main_directory.tex.tpl"\
      "./latex/$main_directory.tex.tpl2"
   sed -i -Ez "s/%\n//Mq" "./latex/$main directory.tex.tpl2"
  current_date=$(date -I"date")
  sed -i "s|@current_date@|$current_date|g"\
    "./latex/$main_directory.tex"
41
  current_git_SHA1=$(git rev-parse HEAD)
   sed -i "s|@current_git_SHA1@|$current_git_SHA1|g"\
     "./latex/$main_directory.tex"
  number of commits=$(qit shortlog | space starting lines | wc -1)
   sed -i "s|@number of commits@|$number of commits|g"\
     "./latex/$main directory.tex"
```

```
number_of_lines="$(code_lines_count_all) total lines,"
number_of_lines+=" $(code_lines_count_not_empty) not empty lines,"
number_of_lines+=" $(code_lines_count_empty) empty lines."
sed -i "s|@number_of_lines@|$number_of_lines|g"\
  "./latex/$main_directory.tex"
tree -a --gitignore\
 -I "$main_directory.aux"\
  -I "$main directory.log"
  -I "$main_directory.out"\
  -I "$main_directory.tex.tpl2"\
  -I current_tree.txt\
 -I current_tree_light.txt\
 -I "node modules/"
 -I "__pycache__/"\
  -I ".mypy cache/"
  -I ".git/"\
  > current_tree_light.txt
tree -a -DFh --gitignore\
 -I "$main_directory.aux"\
  -I "$main_directory.log"\
  -I "$main_directory.out"\
  -I "$main_directory.tex.tpl2"\
 -I current_tree.txt\
 -I current tree light.txt\
 -I "node_modules/"\
 -I "__pycache__/"\
 -I ".mypy_cache/"\
 -I ".git/"\
  > current_tree.txt
shopt -s dotglob
find . -type f -printf '%P\n' | relevant_find | sort\
  | while read -r filename;
do
  git check-ignore -q "$filename" && continue
  base_filename=$(basename "$filename")
  [ "$base_filename" != "current_tree_light.txt" ] || continue
  [ "$base_filename" != "current_tree.txt" ] || continue
  [ "$base_filename" != "COPYING" ] || continue
  [ "$base_filename" != "COPYING.LESSER" ] || continue
  [ "$base_filename" != "$main_directory.pdf" ] || continue
  [ "$base_filename" != "$main_directory.tex" ] || continue
  [ "$base_filename" != "$main_directory.tex.tpl2" ] || continue
  if [[ "$base_filename" == *.md ]]; then
```

```
if [ -f "$filename.tpl" ]; then
97
          # in_place_grep -v "$base_filename$" current_tree.txt
          # in_place_grep -v "$base_filename$" current_tree_light.txt
          continue
       fi
101
     fi
     cleaned_path1=$(sed -e 's/_/\\_/g' <(echo "$filename"))</pre>
103
     cleaned_path2=\$(sed -e 's)//:/g' -e 's).//g' < (echo "$filename"))
     if grep -q " \filename\\\" "./latex/\\main directory.tex.tpl2"; then
105
       echo ""
        # sed -i -Ez\
107
            "s/$filename\n/\
108
            filename/./\./g}\\perref{filename/./\./g}\\perref
109
            "current tree light.txt"
110
     else
111
       echo "The file $filename is not listed"\
112
             " in ./latex/$main_directory.tex.tpl"
113
        echo "TODO:\subsection{"
114
       echo "TODO: $cleaned_path1"
115
       echo "TODO:}"
116
       echo "TODO:\label{"
117
       echo "TODO: $cleaned_path2"
118
       echo "TODO:}"
       echo "TODO:"
120
       echo "TODO:\VerbatimInput[numbers=left,xleftmargin=-5mm]{"
121
       echo "TODO: $filename"
122
       echo "TODO:}"
       echo "TODO:"
124
       echo "TODO:"
     fi
126
   done
127
   shopt -u dotglob
   shopt -s globstar
129
130
   split_last_line() {
131
     # $1=$new_lines
132
     # $2=$prefix
133
     split_last_line_result="$1"
     if echo "$1" | sed -e 's/\\n/\n/g' | grep -q '.\\{71\}\$'; then
135
       start=$(\
          echo "$1" | sed -e 's/\\n/\n/g' | head --lines=-1\
137
          \mid sed -z 's/\n/\n/g'
139
        # echo "start: $start"
       last_line=\$(echo "$1" | sed -e 's/\\n/\n/g' | tail --lines=1)
141
        # echo "last_line: $last_line"
```

```
split_last_line_result=""
143
        if [[ -n "$start" ]]; then
144
          split last line result="$start\n"
145
        split_last_line_result+="${last_line:0:69}\n"
147
        split_last_line_result+="$2${last_line:69}"
     fi
149
150
151
   # We verify if some lines are beyond 70 characters
   # in current_tree_light.txt et current_tree.txt.
153
   trees=("current_tree_light.txt" "current_tree.txt")
   for some_tree in "${trees[@]}"; do
155
     grep '.\{71\}' "$some tree" | while read -r some line; do
156
        # echo "some line: $some line"
157
       prefix=$(\
158
          echo "$some_line"\
159
            | sed -E -e 's/(.*)-[^-]+$/\sqrt{g'} -e 's/[^ ]+$//g'
160
       prefix+=" "
162
        # echo "prefix: $prefix"
        filename=$(\
164
          echo "$some_line"\
            | sed -E 's|.* (([a-zA-Z0-9\._/-]+).)$|\1|g'
166
        # echo "filename: $filename"
168
       line start=$(\
          echo "$some line"\
170
            | sed -E "s/(.*)[]*filename/\1/g"\
171
            | sed -e 's/ *$//q'
172
173
        # echo "line start: $line start"
174
        some line=$(\
175
          echo "$some line"\
            | sed -E -e 's/[/\\[/g' -e 's/\]/\\]/g'
177
178
       new_lines="$prefix$filename"
179
        split_last_line "$new_lines" "$prefix"
       new_lines=$split_last_line_result
181
        split_last_line "$new_lines" "$prefix"
       new_lines=$split_last_line_result
183
        split_last_line "$new_lines" "$prefix"
       new lines=$split last line result
185
        split last line "$new lines" "$prefix"
       new lines=$split last line result
187
        sed -i -e "s/$some_line/$line_start\n$new_lines/g" "$some_tree"
```

```
done
   done
191
   sed -i -e '/@current_tree_light@/{r current_tree_light.txt' -e 'd}'\
    "./latex/$main_directory.tex"
193
   sed -i -e '/@current_tree@/{r current_tree.txt' -e 'd}'\
     "./latex/$main_directory.tex"
195
   pdflatex "./latex/$main_directory.tex" > /dev/null
   pdflatex "./latex/$main_directory.tex" > /dev/null
   pdflatex "./latex/$main_directory.tex" > /dev/null
   files_to_delete=(\
     "$main directory.aux"\
202
     "$main_directory.log"\
203
     "$main directory.out"
204
     "current_tree.txt"
     "current_tree_light.txt"
206
     "./latex/$main_directory.tex.tpl2"
208
   # Comment the following line if you need to debug.
  for filename in "${files_to_delete[@]}"; do
     rm -f "$filename"
  done
```

2.9 build_and_checks_dependencies/generate_from_template.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
```

```
# along with DevOrSysAdminScripts.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
# ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
generate_from_template_with_block_comments() {
  # $1=base_file_name
  # $2=target_file_name
  # $3=enter block comment
  # $4=exit_block_comment
  echo "$3" > "$2.temp"
  cat "$1" >> "$2.temp"
  echo "$4" >> "$2.temp"
  overwrite if not equal "$2" "$2.temp"
}
generate_from_template_with_line_comments() {
 # $1=base_file_name
 # $2=target_file_name
  # $3=line_comment_prefix
  # $4=optional_post_processing
  sed -e "s/^/$3/q" "$1" > "$2.temp"
  if [[ -n "$4" ]]; then
    eval "$4"
  overwrite if not equal "$2" "$2.temp"
}
```

2.10 build_and_checks_dependencies/get_common_text_glob_patterns.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.

# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.

# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
```

```
# You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
   get_common_text_paths_glob_patterns(){
25
     export common_patterns=(\
       '**/*.C'\
       '**/*.css'\
       '**/*.h'\
29
       ' **/*.htm' \
       '**/*.html'\
       '**/*.js'\
       '**/*.json'\
33
       '**/*.md'\
       '**/*.php'\
       '**/*.py'\
       '**/*.sh'\
       '**/*.sql'\
       '**/*.tex'\
       '**/*.toml'\
       '**/*.tpl'\
       '**/*.ts'\
42
       '**/*.txt'\
       '**/*.yml'\
       '**/COPYING'\
       ' **/COPYING.LESSER'\
       '**/pre-commit'\
       '**/.gitignore'\
       '**/py.typed'\
50
51
52
53
   get_common_text_files_glob_patterns(){
     export common_file_patterns=(\
55
       '*.c'\
       '*.css'\
57
       '*.h'\
       ' * . htm' \
59
       '*.html'\
       '*.js'\
       '*.json'\
```

```
' * .md' \
       '*.php'\
       '*.pv'\
       '*.sh'\
       '*.sql'\
       '*.tex'\
       '*.toml'\
       '*.tpl'\
       '*.ts'\
71
       '*.txt'\
       '*.yml'\
       'COPYING' \
       'COPYING.LESSER'\
       'pre-commit'\
       '.gitignore'\
       'py.typed'\
     )
  }
```

2.11 build_and_checks_dependencies/licenses_templates/build_license_templates.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
# along with DevOrSysAdminScripts.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
# ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
subdir="build_and_checks_dependencies"
```

```
source "./$subdir/comparisons.sh"
  source "./$subdir/generate_from_template.sh"
  source "./$subdir/lines_filters.sh"
  source "./$subdir/overwrite_if_not_equal.sh"
  license_subdir="./$subdir/licenses_templates/"
  license_prefix="$license_subdir""license_file_header_"
  licenses=(\
     "GPLv3+"\
34
     "LGPLv3+"
  )
36
  # Various language definitions for text file formats
  block_comment_languages=(\
     "c"\
41
     "py"\
42
43
  block_comment_enters=(\
44
    '/*'\
45
     / " " " / \
47
  block_comment_exits=(\
    ' * / ' \
49
     / " " " / \
51
   equal "${#block_comment_languages[@]}"\
         "${#block_comment_enters[@]}"\
53
         "${#block_comment_exits[@]}"
  if [[ \$? == 0 ]]; then
     echo '/!\'"Problème de définition des tableaux de langages 1"'/!\"
   fi
  line_comment_languages=(\
    "sh"\
60
     "tex"\
62
  line_comment_prefixes=(\
    ′# ′\
64
     / 응 / \
   equal "${#line_comment_languages[@]}"\
        "${#line_comment_prefixes[@]}"
  if [[ $? == 0 ]]; then
     echo '/!\"Problème de définition des tableaux de langages 2"'/!\"
  fi
```

```
# We generate the license header templates adapted to various text
   # files formats.
   # Kamoulox do endfor, Jacques Beauregard XD
   # (C'est toujours mieux que l'inverse :) !)
   # for do endfor -> for do done (Fort Doux Donne).
   for license in "${licenses[@]}"; do
     license_prefix2="$license_prefix$license"
     for ((i=0; i<${#block_comment_languages[@]}; i++)); do</pre>
       extension=${block_comment_languages[i]}
       license_filename="$license_prefix2.$extension"
       enter string=${block comment enters[i]}
       exit_string=${block_comment_exits[i]}
       generate from template with block comments\
         "$license_prefix2.tpl"\
         "$license_filename.tpl"\
         "$enter_string" "$exit_string"
     done
     for ((i=0; i<${#line_comment_languages[@]}; i++)); do</pre>
       extension=${line_comment_languages[i]}
       license_filename="$license_prefix2.$extension"
       prefix_string=${line_comment_prefixes[i]}
       generate_from_template_with_line_comments\
         "$license prefix2.tpl"
         "$license filename.tpl"
         "$prefix string"\
         "sed -i -E -e 's/\s*$//g' '$license_filename.tpl.temp'"
100
     done
101
   done
102
103
104
   file_name=repository_data.txt
105
   grep_variable "$file_name" repository_name
  grep_variable "$file_name" license
  grep_variable "$file_name" full_name
   license_prefix2="$license_prefix$license"
  # First year according to current state of git repository.
  first_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | tail -1)"
  # Last year according to current state of git repository.
  last_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | head -1)"
  copyright_string="$first_year-$last_year $full_name"
   for ((i=0; i<${#block comment languages[@]}; i++)); do
     extension=${block comment languages[i]}
116
     license_filename="$license_prefix2.$extension"
```

```
sed -e "s/@repository_name@/$repository_name/g"\
118
       -e "s/@copyright_string@/$copyright_string/g"\
119
        "$license filename.tpl" > "$license filename.temp"
120
     overwrite_if_not_equal "$license_filename" "$license_filename.temp"
     head --lines=-1 "$license_filename" | tail --lines=-1\
122
       > "$license_filename.temp"
     find . -type f -name "*.$extension" -printf '%P\n' | relevant_find\
124
        | while read -r filename;
125
126
       if is_subfile "$filename" "$license_filename.temp"
128
          echo "File $filename has no/wrong license header?"
130
        fi
131
     done
132
     rm "$license filename.temp"
133
   done
134
   for ((i=0; i<${#line_comment_languages[@]}; i++)); do</pre>
135
     extension=${line_comment_languages[i]}
     license_filename="$license_prefix2.$extension"
137
     sed -e "s/@repository_name@/$repository_name/g"\
       -e "s/@copyright_string@/$copyright_string/g"\
139
       "$license_filename.tpl" > "$license_filename.temp"
     overwrite_if_not_equal "$license_filename" "$license_filename.temp"
141
     find . -type f -name "*.$extension" -printf '%P\n' | relevant_find\
142
        | while read -r filename;
143
     do
145
       if is_subfile "$filename" "$license_filename"
147
          echo "File $filename has no/wrong license header?"
       fi
149
     done
150
   done
151
```

2.12 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.c.tpl

```
1  /*
2  This file is part of @repository_name@ library.
3
4  @repository_name@ is free software:
5  you can redistribute it and/or modify it under the terms
6  of the GNU General Public License
7  as published by the Free Software Foundation,
8  either version 3 of the License,
9  or (at your option) any later version.
```

```
10
11 @repository_name@ is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 See the GNU General Public License for more details.
17
18 You should have received a copy of
19 the GNU General Public License
20 along with @repository_name@.
21 If not, see <https://www.gnu.org/licenses/>.
22
23 @Copyright @copyright_string@
24 */
```

2.13 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.py.tpl

```
11 11 11
  This file is part of @repository_name@ library.
  @repository_name@ is free software:
  you can redistribute it and/or modify it under the terms
  of the GNU General Public License
  as published by the Free Software Foundation,
  either version 3 of the License,
  or (at your option) any later version.
  @repository_name@ is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
  without even the implied warranty of
  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  See the GNU General Public License for more details.
  You should have received a copy of
  the GNU General Public License
  along with @repository_name@.
  If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  @Copyright @copyright_string@
  11 11 11
```

2.14 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.sh.tpl

```
# This file is part of @repository_name@ library.
# @repository_name@ is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# @repository_name@ is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU General Public License for more details.
# You should have received a copy of
# the GNU General Public License
# along with @repository_name@.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
# @Copyright @copyright_string@
```

2.15 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tex.tpl

```
% This file is part of @repository_name@ library.
% @repository_name@ is free software:
% you can redistribute it and/or modify it under the terms
% of the GNU General Public License
% as published by the Free Software Foundation,
% either version 3 of the License,
% or (at your option) any later version.
% @repository_name@ is distributed in the hope
% that it will be useful,
% but WITHOUT ANY WARRANTY;
% without even the implied warranty of
% MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
% See the GNU General Public License for more details.
% You should have received a copy of
% the GNU General Public License
% along with @repository_name@.
```

```
% If not, see <https://www.gnu.org/licenses/>.
% ©Copyright @copyright_string@
```

2.16 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tpl

```
This file is part of @repository_name@ library.
  @repository_name@ is free software:
4 you can redistribute it and/or modify it under the terms
 of the GNU General Public License
  as published by the Free Software Foundation,
  either version 3 of the License,
  or (at your option) any later version.
  @repository_name@ is distributed in the hope
 that it will be useful,
 but WITHOUT ANY WARRANTY;
 without even the implied warranty of
  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  See the GNU General Public License for more details.
 You should have received a copy of
  the GNU General Public License
 along with @repository_name@.
 If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
  @Copyright @copyright_string@
```

2.17 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.c

```
This file is part of DevOrSysAdminScripts library.

DevOrSysAdminScripts is free software:
you can redistribute it and/or modify it under the terms
of the GNU Lesser General Public License
as published by the Free Software Foundation,
either version 3 of the License,
or (at your option) any later version.

DevOrSysAdminScripts is distributed in the hope
that it will be useful,
but WITHOUT ANY WARRANTY;
without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

```
See the GNU Lesser General Public License for more details.

You should have received a copy of
the GNU Lesser General Public License
along with DevOrSysAdminScripts.
If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/</a>.

©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
*/
```

2.18 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.c.tpl

```
This file is part of @repository_name@ library.
  @repository_name@ is free software:
5 you can redistribute it and/or modify it under the terms
  of the GNU Lesser General Public License
  as published by the Free Software Foundation,
  either version 3 of the License,
  or (at your option) any later version.
  @repository_name@ is distributed in the hope
  that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  See the GNU Lesser General Public License for more details.
  You should have received a copy of
  the GNU Lesser General Public License
20 along with @repository_name@.
  If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  @Copyright @copyright_string@
24 */
```

2.19 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.py

```
This file is part of DevOrSysAdminScripts library.

DevOrSysAdminScripts is free software:
you can redistribute it and/or modify it under the terms
of the GNU Lesser General Public License
as published by the Free Software Foundation,
```

```
either version 3 of the License,
or (at your option) any later version.

DevOrSysAdminScripts is distributed in the hope
that it will be useful,
but WITHOUT ANY WARRANTY;
without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
See the GNU Lesser General Public License for more details.

You should have received a copy of
the GNU Lesser General Public License
along with DevOrSysAdminScripts.
If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/</a>>.

©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
```

2.20 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.py.tpl

```
This file is part of @repository_name@ library.
  @repository_name@ is free software:
  you can redistribute it and/or modify it under the terms
  of the GNU Lesser General Public License
  as published by the Free Software Foundation,
  either version 3 of the License,
  or (at your option) any later version.
  @repository_name@ is distributed in the hope
  that it will be useful,
13 but WITHOUT ANY WARRANTY;
  without even the implied warranty of
  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  See the GNU Lesser General Public License for more details.
  You should have received a copy of
  the GNU Lesser General Public License
  along with @repository_name@.
  If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
  @Copyright @copyright_string@
```

2.21 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.sh

```
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
# without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
# along with DevOrSysAdminScripts.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
# @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
```

2.22 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.sh.tpl

```
# This file is part of @repository_name@ library.
# @repository_name@ is free software:
 # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
 # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # @repository_name@ is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
 # You should have received a copy of
 # the GNU Lesser General Public License
 # along with @repository_name@.
```

```
# If not, see <https://www.gnu.org/licenses/>.
#
Copyright @copyright_string@
```

2.23 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tex

```
% This file is part of DevOrSysAdminScripts library.
9
% DevOrSysAdminScripts is free software:
% you can redistribute it and/or modify it under the terms
% of the GNU Lesser General Public License
% as published by the Free Software Foundation,
% either version 3 of the License,
% or (at your option) any later version.
% DevOrSysAdminScripts is distributed in the hope
% that it will be useful,
% but WITHOUT ANY WARRANTY;
% without even the implied warranty of
% MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
% See the GNU Lesser General Public License for more details.
% You should have received a copy of
% the GNU Lesser General Public License
% along with DevOrSysAdminScripts.
% If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
% ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
```

2.24 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tex.tpl

```
This file is part of @repository_name@ library.

%

@repository_name@ is free software:

% you can redistribute it and/or modify it under the terms

% of the GNU Lesser General Public License

% as published by the Free Software Foundation,

% either version 3 of the License,

% or (at your option) any later version.

%

@repository_name@ is distributed in the hope

that it will be useful,

but WITHOUT ANY WARRANTY;

% without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

% See the GNU Lesser General Public License for more details.
```

```
16 %
17 % You should have received a copy of
18 % the GNU Lesser General Public License
19 % along with @repository_name@.
20 % If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/</a>.
21 %
22 % ©Copyright @copyright_string@
```

2.25 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tpl

```
This file is part of @repository_name@ library.
3 @repository_name@ is free software:
4 you can redistribute it and/or modify it under the terms
of the GNU Lesser General Public License
  as published by the Free Software Foundation,
  either version 3 of the License,
  or (at your option) any later version.
  @repository_name@ is distributed in the hope
that it will be useful,
12 but WITHOUT ANY WARRANTY;
 without even the implied warranty of
  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  See the GNU Lesser General Public License for more details.
17 You should have received a copy of
  the GNU Lesser General Public License
19 along with @repository_name@.
 If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
 ©Copyright @copyright string@
```

2.26 build_and_checks_dependencies/lines_counts.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.

# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
```

```
12 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24
  subdir="build and checks dependencies"
  source "./$subdir/get_common_text_glob_patterns.sh"
   source "./$subdir/lines filters.sh"
  all_code_lines(){
     get_common_text_files_glob_patterns
     for pattern in "${common_file_patterns[@]}"; do
31
       [ "$1" != "-v" ] || echo "Iterating on pattern: $pattern"
       find . -type f -name "$pattern" -printf '%P\n'\
         | xargs grep -H -v 'a(?!a)a'
     done
   }
  all_self_code_lines(){
    all_code_lines | relevant_grep\
       | not_license_grep | not_main_tex_grep
   }
41
  all_self_empty_code_lines(){
     all self code lines | empty lines after filename
  }
45
  all_self_not_empty_code_lines() {
     all_self_code_lines | not_empty_lines_after_filename
  }
  code_lines_count_all() {
     all_self_code_lines | wc -l
52
  code_lines_count_empty(){
     all_self_empty_code_lines | wc -l
```

```
ss

59 code_lines_count_not_empty(){

60 all_self_not_empty_code_lines | wc -l
```

2.27 build_and_checks_dependencies/lines_filters.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
 # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
 # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
 # DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
 # but WITHOUT ANY WARRANTY;
 # without even the implied warranty of
 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
 # See the GNU Lesser General Public License for more details.
 # You should have received a copy of
 # the GNU Lesser General Public License
 # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
 # The goal of ths file is to have some common line filters
 # for bash processing and pipes.
 # As is the case for other .sh files in this repository,
 # it can be copied somewhere in your home directory
  # and sourced in your .bashrc.
 current_path=$(pwd)
  main_directory=$(basename "$current_path")
 ll_wc() {
   # current options to wc:
    # -c --bytes
    # -m --chars
    # -l --lines
    # --files0-from # Incompatible with cat,
```

```
# another thing intentional by ?
                     # I don't see the meaning of "files0".
41
     # -L --max-line-length
     # -w --words
     # --help
44
     # --version
     # New option by Laurent Lyaudet (and probably other before):
     # -n --no-filenames display only number(s)
     # I think I did that the first time many years ago (Teliae ?).
     args=""
     number_only=0
     for arg in $0; do
       if [[ \$arg == "-n" ]]; then
52
         number only=1
       elif [[ $arg == "--no-filenames" ]]; then
         number_only=1
55
       else
         if [[ $number_only == 0 ]]; then
          args+=" ""$arg"
           continue
         fi
         if [[ "$arg" == "-*" ]]; then
           args+=" ""$arg"
         fi
63
       fi
     done
     # echo "$args"
     # echo "$number_only"
     if [[ $number_only -gt 0 ]]; then
       # Too simple code, only the base use case is handled now.
       # Convenient but incomplete.
       # With more time,
71
       # the simpler would be to submit a patch to GNU coreutils,
       # unless blockade from assholes.
       # Otherwise, it may be more simply handled in PHP or Python
       # (argparse, etc.).
       # You'll need to start by improving cat first,
       # with --files0-from handling.
       # echo "hack cat '${!#}' | wc $args"
       cat "${!#}" | wc "${args[@]}"
     else
       # echo "normal"
       wc "${args[@]}"
     fi
  }
84
```

```
# I submitted a patch for wc:).
   # echo "https://domain/list-path/2024-05/msg00013.html" | \
       sed -e 's|domain|lists.gnu.org|' \
            -e 's|list-path|archive/html/bug-coreutils|'
   # I found another way to have a long URL fit on 70 characters.
   # If it is merged, the following would be better:
   # If --no-filenames option available,
   # we redefine ll_wc command as an alias.
   wc help text=$(wc --help)
   if [[ "$wc_help_text" == *" --no-filenames "* ]]; then
     alias ll wc='wc'
   fi
98
   in_place_grep() {
     grep $@ > "${!#}"".temp_in_place_grep"
     lines_before=$(ll_wc -l -n "${!#}")
101
     lines_after=$(ll_wc -l -n "${!#}"".temp_in_place_grep")
102
     # echo "$lines_before"
103
     # echo "$lines_after"
     if [[ "$lines_before" == "$lines_after" ]]; then
105
       rm "${!#}"".temp_in_place_grep"
       return
107
     fi
     mv "${!#}"".temp_in_place_grep" "${!#}"
109
110
111
   grep_variable() {
112
     # $1=$file
113
     # $2=$variable_name
     regexp="(?<=^$2=).*$"
115
     # echo $regexp
116
     variable_value="$(grep -oP "$regexp" "$1")"
     # echo $variable_value
118
     declare -q "$2"="$variable_value"
119
120
   empty_lines(){
122
     grep '^$'
124
125
   not_empty_lines(){
     grep -v '^$'
128
   space_starting_lines(){
130
     grep '^[ ]'
```

```
132
   not_space_starting_lines(){
     grep '^[^ ]'
135
136
137
   empty_lines_after_filename() {
138
     grep '^[^:]\+:$'
139
140
   not_empty_lines_after_filename(){
142
     grep -v '^[^:]\+:$'
143
144
145
   space_starting_lines_after_filename(){
     grep '^[^:]\+: '
147
148
149
   not_space_starting_lines_after_filename(){
     grep '^[^:]\+:[^ ]'
151
153
   not_JS_dependencies_find() {
154
     grep -vE "(^|/)node_modules/" | grep -vE "(^|/)package-lock\.json$"
155
156
157
   not_JS_dependencies_grep() {
158
     grep -v "^[^:]*node_modules/" | grep -v "^[^:]*package-lock\.json:"
159
   }
160
   not dependencies find(){
162
     not_JS_dependencies_find
163
164
165
   not_dependencies_grep(){
166
     not_JS_dependencies_grep
168
   not_python_cache_find() {
170
     grep -vE "(^|/)__pycache__/" | grep -vE "(^|/)\.mypy_cache/"
172
173
   not_python_cache_grep() {
174
     grep -v "^[^:]*_pycache__/" | grep -v "^[^:]*\.mypy_cache/"
   }
176
```

```
not_cache_find() {
      not_python_cache_find
180
   not_cache_grep() {
182
     not_python_cache_grep
184
185
   not_git_find() {
186
      grep -vE "(^|/)\.git/"
188
189
   not_git_grep(){
190
     grep -v "^[^:]*\.git/"
191
192
193
   not_archive_find() {
      grep -vE "(\.gz|\.rar|\.tar|\.tgz|\.whl)$"
195
197
   not_archive_grep() {
      grep -vE "^[^:]*(\.gz|\.rar|\.tar|\.tgz|\.whl):"
199
200
201
   not_license_find() {
202
      grep -vE "(^|/)COPYING$" | grep -vE "(^|/)COPYING\.LESSER$"
203
204
205
   not_license_grep() {
      grep -v "^[^:]*COPYING:" | grep -v "^[^:]*COPYING\.LESSER:"
207
208
   not_main_tex_find() {
210
      grep -vE "(^|/)$main_directory\.tex$"
211
212
   not_main_tex_grep() {
214
      grep -v "^[^:]*$main_directory\.tex:"
216
   relevant_find() {
218
      not_dependencies_find | not_cache_find | not_git_find\
      | not archive find
220
222
   relevant_grep(){
```

```
224    not_dependencies_grep | not_cache_grep | not_git_grep\
225    | not_archive_grep
226  }
```

2.28 build_and_checks_dependencies/overwrite_if_not_equal.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  overwrite_if_not_equal(){
    # $1=$target file name
     # $2=$temp_file_name
     if [[ ! -f "$1" ]]; then
      mv "$2" "$1"
      return
     fi
     diff -q "$1" "$2"
     is_equal=$?
     if [[ $is_equal == 0 ]]; then
     rm "$2"
    else
      mv "$2" "$1"
     fi
```

2.29 build_and_checks_dependencies/python_black_complement.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  # It was rejected to enhance black with this currently.
  # And moreover, at some point, I saw the reverse rule
  # in black or pylint to add an empty line...
  # This regexp may give false positives,
  # but that's not the end of the world.
  check_no_empty_line_after_python_function_docstring() {
   echo "Checking empty lines after Python function docstrings"
    pcregrep -M $'def [^"]*"""([^"]|"(?!""))*"""\n\n(?!\s*def)'\
       -- **/*.py
33
  }
34
  python_black_complement() {
    check_no_empty_line_after_python_function_docstring
  }
```

2.30 build_and_checks_dependencies/python_isort_complement.sh

```
# DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  subdir="build_and_checks_dependencies"
  source "./$subdir/lines_filters.sh"
  source "./$subdir/overwrite_if_not_equal.sh"
  check collections abc place() {
     echo "Checking import of _collections_abc is at the right place"
    find . -name "*.py" | relevant_find | while read -r filename; do
      [ -f "$filename" ] || continue
       sed -Ez 's/\n(\nfrom _collections_abc[^\n]*)/\1\n/Mg'\
         "$filename" > "$filename.temp"
       overwrite_if_not_equal "$filename" "$filename.temp"
     done
  }
37
39 python_isort_complement() {
     check_collections_abc_place
  }
41
```

2.31 build_and_checks_dependencies/too_long_code_lines.sh

```
#!/usr/bin/env bash
this file is part of DevOrSysAdminScripts library.

# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
```

```
# of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
 # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
 # See the GNU Lesser General Public License for more details.
 # You should have received a copy of
 # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  subdir="build_and_checks_dependencies"
  source "./$subdir/get_common_text_glob_patterns.sh"
  too_long_code_lines(){
    get_common_text_files_glob_patterns
     for pattern in "${common_file_patterns[@]}"; do
       [ "$1" != "-v" ] || echo "Iterating on pattern: $pattern"
       find . -type f -name "$pattern" -printf '%P\n'\
         \mid xargs grep -H '.\{71\}'
     done
  }
35
```

2.32 build_and_checks_dependencies/update_common_build_and_checks.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.

# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
# either version 3 of the License,
# or (at your option) any later version.

# DevOrSysAdminScripts is distributed in the hope
# that it will be useful,
# but WITHOUT ANY WARRANTY;
```

```
# without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
   # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
   cp ./common_build_and_checks.sh.tpl ./common_build_and_checks.sh
   file names=(\
27
     "build_md_from_printable_md.sh"\
     "check shell scripts beginning.sh"\
     "check_URLs.sh"\
     "comparisons.sh"\
     "create_PDF.sh"\
     "generate_from_template.sh"\
     "get_common_text_glob_patterns.sh"\
     "licenses_templates/build_license_templates.sh"
     "licenses_templates/license_file_header_GPLv3+.tpl"
     "licenses_templates/license_file_header_LGPLv3+.tpl"
     "lines_counts.sh"\
     "lines filters.sh"
     "overwrite if not equal.sh"
     "python black complement.sh"\
     "python_isort_complement.sh"\
     "too_long_code_lines.sh"\
   )
  for file name in "${file names[@]}"; do
     file_sha512=$(sha512sum "./$file_name" | cut -f1 -d' ')
     file_sha512_1="correct_sha512='${file_sha512:0:53}'"
     file_sha512_2="correct_sha512\+='${file_sha512:53:52}'"
     file_sha512_3="correct_sha512\+='${file_sha512:105}'"
     file_sha512_all="$file_sha512_1\n"
     file\_sha512\_all+="$file\_sha512\_2\n"
     file_sha512_all+="$file_sha512_3"
     base_filename=$(basename $file_name)
     sed -i "s|@sha512_$base_filename@|$file_sha512_all|g"\
         ./common build and checks.sh
  done
  cp ./build_and_checks.sh.tpl ../build_and_checks.sh
```

```
file_sha512=$(sha512sum common_build_and_checks.sh | cut -f1 -d' ')
file_sha512_1="correct_sha512='${file_sha512:0:53}'"
file_sha512_2="correct_sha512\+='${file_sha512:53:52}'"
file_sha512_3="correct_sha512\+='${file_sha512:105}'"
file_sha512_all="$file_sha512_1\n"
file_sha512_all+="$file_sha512_2\n"
file_sha512_all+="$file_sha512_3"
sed -i "s|@sha512_common_build_and_checks.sh@|$file_sha512_all|g"\
../build_and_checks.sh
```

2.33 build_and_checks.sh

```
#!/usr/bin/env bash
<sup>2</sup> # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  source ./wget_sha512.sh
  mkdir -p build_and_checks_dependencies/licenses_templates
  subdir="build_and_checks_dependencies"
  personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build_and_checks_dependencies"
  URL_beginning="$personal_github$dependencies"
```

2.34 git_checks.sh

```
#!/usr/bin/env bash
2 # This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
5 # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
# either version 3 of the License,
  # or (at your option) any later version.
# DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
check_files() {
    send_summary_1="ATTENTION : models modifiés"
    send body 1="Vérifiez si besoin de migrations"
     send_body_2="Pensez aussi aux contraintes d'unicités"
```

```
send_body_2+=" dès la création du modèle"
     send_summary_2="ATTENTION : serializers modifiés"
     send_body_3="Les nouveaux preloadings sont interdits -> #Prefetch()"
     if git diff --cached --name-only | grep models;
33
       notify-send "$send_summary_1" "$send_body_1"
       notify-send "$send_summary_1" "$send_body_2"
     fi
     if git diff --cached --name-only | grep serializer;
     then
       notify-send "$send_summary_2" "$send_body_3"
     fi
     return 0
41
42
43
44
   check_no_abusive_trailing_comma(){
     send_summary_1="ATTENTION"
     send_body_1="Il semblerait que vous affectiez un tuple"
     send_body_1+=" au lieu d'une autre valeur dans une variable."
     if git diff --cached -r | grep ' = .*, \s*$';
       notify-send "$send_summary_1" "$send_body_1"
       return 1
52
     fi
    return 0
54
   check_black_code_formatting() {
     # attention ça ne marche que sur les fichiers "stagés" avec git add
     files_string=$(git diff --cached --name-only | grep '\.py')
     echo "$files string"
     mapfile -t some_files <<< "$files_string"</pre>
     my_error=0
     for file in ${some_files[@]};
       echo "Black will check formatting on file $file"
       if ! black --check --diff "$file";
       then
        my_error=1
       fi
     done
71
     if [ $my_error -eq '1' ];
72
     then
73
       return 1
```

```
75 fi
76 return 0
```

2.35 latex/DevOrSysAdminScripts.tex.tpl

```
% This file is part of DevOrSysAdminScripts library.
  용
2
  % DevOrSysAdminScripts is free software:
  % you can redistribute it and/or modify it under the terms
  % of the GNU Lesser General Public License
  % as published by the Free Software Foundation,
  % either version 3 of the License,
  % or (at your option) any later version.
  % DevOrSysAdminScripts is distributed in the hope
  % that it will be useful,
  % but WITHOUT ANY WARRANTY;
  % without even the implied warranty of
  % MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  % See the GNU Lesser General Public License for more details.
  % You should have received a copy of
  % the GNU Lesser General Public License
  % along with DevOrSysAdminScripts.
  % If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
   % @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  \documentclass{article}
  \usepackage[utf8]{inputenc}
  \usepackage{subfigure}
vusepackage{amsmath}
  \usepackage{amssymb}
  \usepackage{amsthm}
  \usepackage[pdftex]{hyperref}
  \usepackage{tikz}
   \usepackage{caption}
  \usepackage[round]{natbib}
  \usepackage{fancyhdr}
  \usepackage{amsfonts}
  \usepackage{times}
  \usepackage{ifpdf}
  \usepackage{latexsym}
  \usepackage{graphicx}
```

```
\usepackage{enumerate}
  \usepackage{pmboxdraw}
  \usepackage{fancyvrb}
  % *** les environnements ***
  %\theoremstyle{break}
  \newtheorem{definition} {Definition} [section]
  \newtheorem{proposition} [definition] {Proposition}
  \newtheorem{theorem} [definition] {Theorem}
  \newtheorem{lemma} [definition] {Lemma}
  \newtheorem{corollary} [definition] {Corollary}
  \newtheorem{remark} [definition] {Remark}
  \newtheorem{openproblem}[definition]{Open problem}
  \begin{document}
  \author{
    Laurent Lyaudet \\
     \url{https://lyaudet.eu/laurent/}\\
    laurent.lyaudet@gmail.com
  \title{DevOrSysAdminScripts}
  \maketitle
  \begin{abstract}
  Some ''small'' useful scripts
  for enhancing development or system-administrators tasks
  \end{abstract}
  Current version: @current_date@
  Current number of commits: @number_of_commits@
  Current git SHA1: @current_git_SHA1@
  Code lines: @number_of_lines@
  \section{Files tree}
  \label{section:tree}
  \begin{verbatim}
82 @current_tree_light@
  \end{verbatim}
 \begin{verbatim}
 @current_tree@
```

```
\end{verbatim}
   \section{Listing of files}
   \label{section:listing}
  The following source code is covered by LGPLv3+.
   The text of the license is available at:
   \url{https://www.gnu.org/licenses/}.
   The git repository of this source code is also available at:
   \url{https://github.com/LLyaudet/DevOrSysAdminScripts/}.
   \subsection{
     build\ and\ checks\ dependencies/build\ and\ checks.sh.tpl
100
   }
101
   \label{
102
     build_and_checks_dependencies:build_and_checksshtpl
104
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
106
     build_and_checks_dependencies/build_and_checks.sh.tpl
   }
108
110
   \subsection{
     build\ and\ checks\ dependencies/build\ md\ from\ printable\ md.sh
112
   \label{
114
     build_and_checks_dependencies:build_md_from_printable_mdsh
   }
116
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/build md from printable md.sh
119
   }
120
121
   \subsection{
123
     build\_and\_checks\_dependencies/check\_shell\_scripts\_beginning.sh
125
   \label{
     build_and_checks_dependencies:check_shell_scripts_beginningsh
127
129
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/check shell scripts beginning.sh
131
```

```
133
   \subsection{
135
     build\_and\_checks\_dependencies/check\_URLs.sh
137
   \label{
     build_and_checks_dependencies:check_URLssh
139
140
141
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/check_URLs.sh
143
144
145
146
   \subsection{
     build\ and\ checks\ dependencies/common\ build\ and\ checks.sh
148
149
   \label{
150
     build_and_checks_dependencies:common_build_and_checkssh
152
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
154
     build_and_checks_dependencies/common_build_and_checks.sh
156
158
   \subsection{
     build\ and\ checks\ dependencies/common\ build\ and\ checks.sh.tpl
160
161
   \label{
162
     build_and_checks_dependencies:common_build_and_checksshtpl
165
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/common_build_and_checks.sh.tpl
167
   }
169
   \subsection{
171
     build\_and\_checks\_dependencies/comparisons.sh
173
   \label{
     build and checks dependencies:comparisonssh
175
177
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
```

```
build_and_checks_dependencies/comparisons.sh
179
180
181
   \subsection{
183
     build\_and\_checks\_dependencies/create\_PDF.sh
184
185
   \label{
     build and checks dependencies: create PDFsh
187
189
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/create_PDF.sh
191
192
193
194
   \subsection{
     build\_and\_checks\_dependencies/generate\_from\_template.sh
196
197
198
     build_and_checks_dependencies:generate_from_templatesh
   }
200
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
202
     build_and_checks_dependencies/generate_from_template.sh
203
204
206
   \subsection{
     build\_and\_checks\_dependencies/get\_common\_text\_glob\_patterns%
208
   .sh
209
   }
210
   \label{
211
     build_and_checks_dependencies:get_common_text_glob_patternssh
212
213
214
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
215
     build_and_checks_dependencies/get_common_text_glob_patterns.sh
217
219
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
221
  build\_license\_templates.sh
   }
223
```

```
build_and_checks_dependencies:licenses_templates:%
   build_license_templatessh
227
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
229
     build_and_checks_dependencies/licenses_templates/%
   build_license_templates.sh
231
233
   \subsection{
235
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_GPLv3+.c.tpl
237
238
   \label{
239
     build and checks dependencies: licenses templates: %
   license_file_header_GPLv3+ctpl
242
243
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
244
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_GPLv3+.c.tpl
246
248
   \subsection{
250
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_GPLv3+.py.tpl
252
   \label{
254
     build and checks dependencies: licenses templates: %
   license_file_header_GPLv3+pytpl
257
258
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_GPLv3+.py.tpl
261
   }
263
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\ file\ header\ GPLv3+.sh.tpl
267
   \label{
269
     build_and_checks_dependencies:licenses_templates:%
```

```
license_file_header_GPLv3+shtpl
272
273
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
275
   license_file_header_GPLv3+.sh.tpl
277
279
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_GPLv3+.tex.tpl
283
   \label{
284
     build and checks dependencies: licenses templates: %
   license file header GPLv3+textpl
   }
287
288
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_GPLv3+.tex.tpl
292
294
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
   license\_file\_header\_GPLv3+.tpl
298
   \label{
     build_and_checks_dependencies:licenses_templates:%
300
   license_file_header_GPLv3+tpl
   }
302
303
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
305
   license_file_header_GPLv3+.tpl
307
309
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.c
313
   \label{
     build and checks dependencies: licenses templates: %
315
   license_file_header_LGPLv3+c
```

```
}
317
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
319
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.c
321
   }
323
   \subsection{
325
     build\ and\ checks\ dependencies/licenses\ templates/%
   license\ file\ header\ LGPLv3+.c.tpl
327
   \label{
329
    build and checks dependencies: licenses templates: %
330
   license file header LGPLv3+ctpl
332
333
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
334
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.c.tpl
336
338
   \subsection{
340
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\ file\ header\ LGPLv3+.py
342
   \label{
344
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+py
   }
348
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.py
351
   }
352
353
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.py.tpl
357
   \label{
359
    build_and_checks_dependencies:licenses_templates:%
  license file header LGPLv3+pytpl
   }
```

```
363
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
365
   license_file_header_LGPLv3+.py.tpl
367
369
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
371
   license\_file\_header\_LGPLv3+.sh
373
   \label{
     build_and_checks_dependencies:licenses_templates:%
375
   license file header LGPLv3+sh
   }
377
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.sh
382
383
384
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.sh.tpl
388
   \label{
     build and checks dependencies: licenses templates: %
390
   license_file_header_LGPLv3+shtpl
   }
392
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
   license_file_header_LGPLv3+.sh.tpl
397
398
399
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
401
   license\_file\_header\_LGPLv3+.tex
   }
403
   \label{
     build and checks dependencies: licenses templates: %
   license_file_header_LGPLv3+tex
   }
407
```

```
\VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license file header LGPLv3+.tex
411
412
413
   \subsection{
415
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\ file\ header\ LGPLv3+.tex.tpl
417
   \label{
419
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+textpl
421
422
423
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
424
     build_and_checks_dependencies/licenses_templates/%
425
   license_file_header_LGPLv3+.tex.tpl
426
427
428
429
   \subsection{
430
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.tpl
432
   \label{
434
     build_and_checks_dependencies:licenses_templates:%
   license file header LGPLv3+tpl
436
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
439
     build and checks dependencies/licenses templates/%
440
   license file header LGPLv3+.tpl
441
442
443
444
   \subsection{
445
     build\_and\_checks\_dependencies/lines\_counts.sh
447
   \label{
     build_and_checks_dependencies:lines_countssh
449
451
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/lines counts.sh
453
```

```
455
   \subsection{
457
     build\_and\_checks\_dependencies/lines\_filters.sh
459
   \label{
     build_and_checks_dependencies:lines_filterssh
461
462
463
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/lines_filters.sh
465
466
467
468
   \subsection{
     build\ and\ checks\ dependencies/overwrite\ if\ not\ equal.sh
470
471
   \label{
472
     build_and_checks_dependencies:overwrite_if_not_equalsh
474
475
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
476
     build_and_checks_dependencies/overwrite_if_not_equal.sh
478
480
   \subsection{
     build\ and\ checks\ dependencies/python\ black\ complement.sh
482
   \label{
484
     build_and_checks_dependencies:python_black_complementsh
486
487
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/python_black_complement.sh
489
   }
490
491
   \subsection{
493
     build\_and\_checks\_dependencies/python\_isort\_complement.sh
495
   \label{
     build and checks dependencies: python isort complementsh
497
499
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
```

```
build_and_checks_dependencies/python_isort_complement.sh
501
502
503
   \subsection{
505
     build\_and\_checks\_dependencies/too\_long\_code\_lines.sh
506
   }
507
   \label{
     build and checks dependencies: too long code linessh
509
511
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/too_long_code_lines.sh
513
514
515
516
   \subsection{
     build\_and\_checks\_dependencies/update\_common\_build\_and\_checks%
518
   .sh
519
520
   \label{
     build_and_checks_dependencies:update_common_build_and_checkssh
522
524
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
525
     build and checks dependencies/update common build and checks.sh
526
528
   \subsection{
530
     build\_and\_checks.sh
531
532
   \label{
533
     build_and_checkssh
534
535
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
537
     build_and_checks.sh
539
541
   \subsection{
     git\ checks.sh
543
   \label{
545
     git_checkssh
```

```
}
547
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     git_checks.sh
551
553
   \subsection{
     latex/DevOrSysAdminScripts.tex.tpl
555
   \label{
557
     latex:DevOrSysAdminScriptstextpl
559
560
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     latex/DevOrSysAdminScripts.tex.tpl
562
563
564
   \subsection{
566
    LiensUtiles.txt
   }
568
   \label{
    LiensUtilestxt
572
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     LiensUtiles.txt
574
   }
576
577
   \subsection{
    pre-commit
579
580
   \label{
581
     pre-commit
583
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
585
     pre-commit
587
589
   \subsection{
     README.md.tpl
591
```

```
\label{
      READMEmdtpl
595
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
597
      README.md.tpl
   }
599
601
   \subsection{
      repository\_data.txt
603
604
   \label{
605
      repository datatxt
606
    }
607
608
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
      repository_data.txt
610
611
612
   \subsection{
614
      wget\_sha512.sh
616
   \label{
      wget sha512sh
618
619
620
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
621
      wget_sha512.sh
622
623
624
625
   Merci Dieu ! Merci P\'ere ! Merci Seigneur ! Merci Saint Esprit !
626
627
   \end{document}
```

2.36 LiensUtiles.txt

```
https://support.google.com/a/answer/9476255?hl=fr#zippy=%2C%C3%A9tape\
configurez-le-service-de-migration-de-donn%C3%A9es
https://stackoverflow.com/a/78413334/5796086
https://stackoverflow.com/questions/21612980/\
why-is-usr-bin-env-bash-superior-to-bin-bash/78413334
https://web.archive.org/web/20240501105801/https://stackoverflow.com\
questions/21612980/why-is-usr-bin-env-bash-superior-to-bin-bash/\
```

2.37 pre-commit

```
#!/usr/bin/env bash
2 # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
   # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  . ../git_checks.sh
27 git_hook_error=0
28 if ! check files
29 then
     git_hook_error=1
  fi
  if ! check_no_abusive_trailing_comma
  then
   git_hook_error=1
  fi
  if ! check_black_code_formatting
  then
     git_hook_error=1
40 if [ $git_hook_error -eq '1' ];
41 then
    exit 1
```

```
43 fi
44 exit 0
```

2.38 README.md.tpl

```
# DevOrSysAdminScripts
  [![CodeFactor-badge]][CodeFactor-package-page]
  [![CodeClimateMaintainability-badge]][CodeClimateM13y-package-page]
[![Codacy-badge]][Codacy-package-page]
  ![GitHub-top-language-badge]
  ![GitHub-license-badge]
  ![GitHub-code-size-in-bytes-badge]
                 **Some "small" useful scripts**
10
  |:----:|
  | **for enhancing development or system-administrators tasks** |
 Currently, the biggest part of this repository is in
14
  a suite of shell scripts about build and checks that
  I use in some of my other repositories.
  [CodeFactor-badge]: https://www.codefactor.io/repository/github/\
  llyaudet/DevOrSysAdminScripts/badge
  [CodeFactor-package-page]: https://www.codefactor.io/repository/\
  github/llyaudet/DevOrSysAdminScripts
  [CodeClimateMaintainability-badge]: https://api.codeclimate.com/v1/\
  badges/b619ce83a81cc4a55e18/maintainability
  [CodeClimateM13y-package-page]: https://codeclimate.com/
  github/LLyaudet/DevOrSysAdminScripts/maintainability
  [Codacy-badge]: https://app.codacy.com/project/badge/Grade/\
  3dd6ef85e8db4460991d1ebc404b68dd
  [Codacy-package-page]: https://app.codacy.com/qh/LLyaudet/\
  DevOrSysAdminScripts/dashboard?utm_source=gh&utm_medium=referral
  &utm_content=&utm_campaign=Badge_grade
  [GitHub-top-language-badge]: https://img.shields.io/github/\
  languages/top/llyaudet/DevOrSysAdminScripts
  [GitHub-license-badge]: https://img.shields.io/github/license/\
  llyaudet/DevOrSysAdminScripts
```

```
GitHub-code-size-in-bytes-badge]: https://img.shields.io/github/\
languages/code-size/llyaudet/DevOrSysAdminScripts
```

2.39 repository_data.txt

```
repository_name=DevOrSysAdminScripts
repository_web_url=https://github.com/LLyaudet/DevOrSysAdminScripts/
repository_git_url=git@github.com:LLyaudet/DevOrSysAdminScripts.git
abstract=Some \small" useful scripts
abstract=for enhancing development or system-administrators tasks
license=LGPLv3+
name=Laurent Lyaudet
full_name=Laurent Frédéric Bernard François Lyaudet
email=Laurent.Lyaudet@gmail.com
website=https://lyaudet.eu/laurent/
acknowledgments=Merci Dieu !
acknowledgments=Merci Père ! Merci Seigneur ! Merci Saint Esprit !
```

2.40 wget_sha512.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
 # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
 # but WITHOUT ANY WARRANTY;
 # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
 # If not, see <https://www.gnu.org/licenses/>.
  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
25 wget_sha512() {
```

```
# $1 filename
# $2 download_URL
# $3 correct_sha512
if [[ ! -f "$1" ]];
then
    wget -O "$1" "$2"

fi
present_sha512=$(sha512sum "$1" | cut -f1 -d' ')
if [[ "$present_sha512" != "$3" ]];
then
    echo "$1 does not have correct sha512"
    echo "wanted $3"
    echo "found $present_sha512"
    exit
fi
```

Merci Dieu! Merci Père! Merci Seigneur! Merci Saint Esprit!