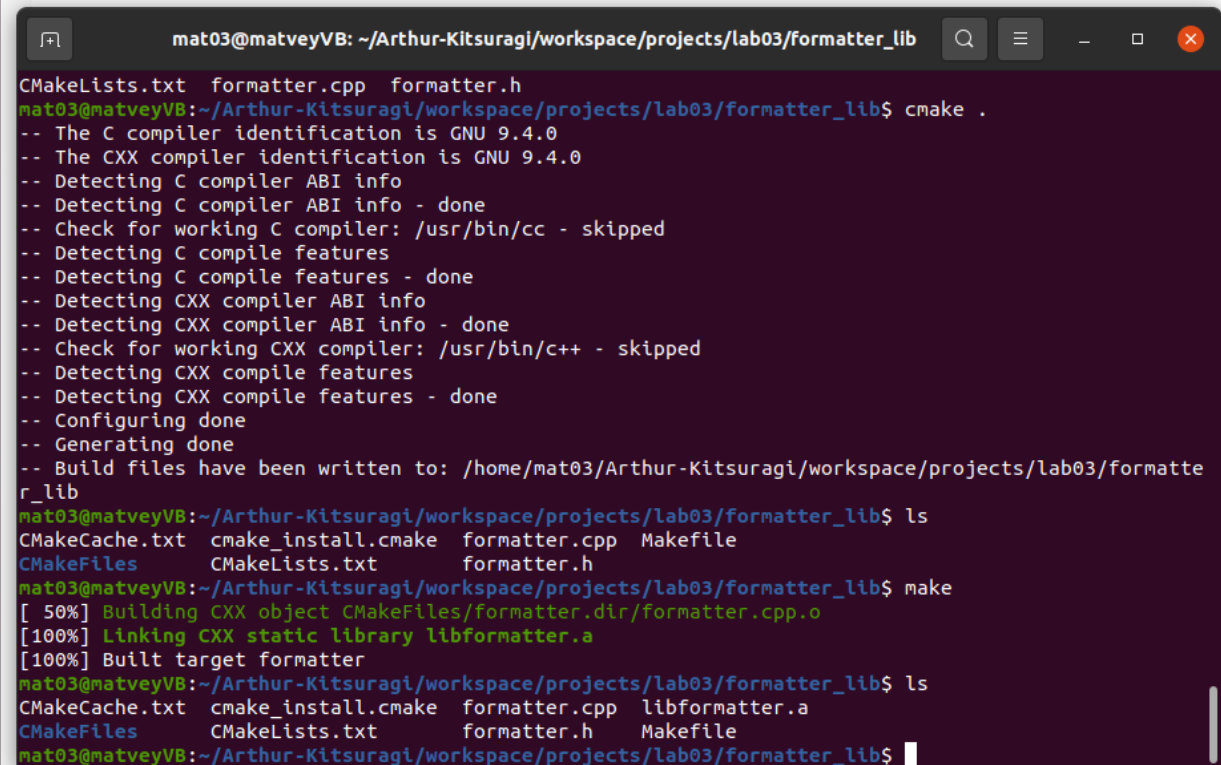


Задание 1.

The file "/home/mat03/Arthur-Kitsuragi...ects/lab03/CMakeLists.txt" changed on disk.

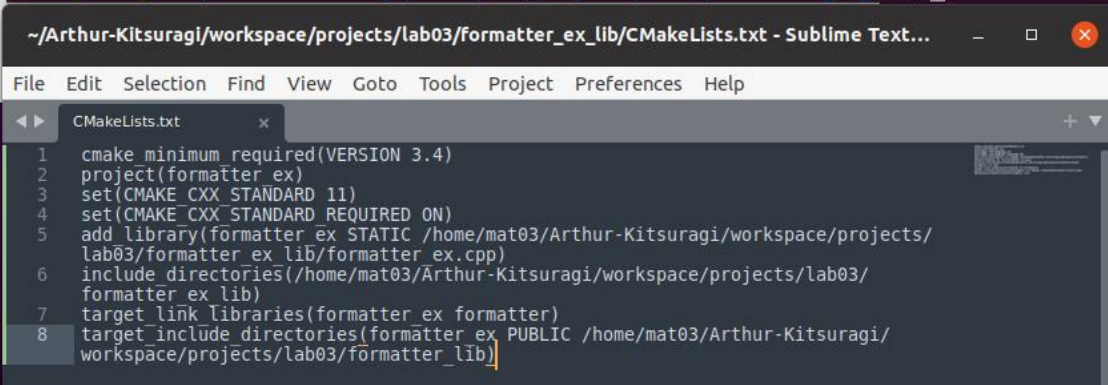
```
1 cmake_minimum_required(VERSION 3.4)
2 project(print)
3 set(CMAKE_CXX_STANDARD 11)
4 set(CMAKE_CXX_STANDARD_REQUIRED ON)
5 add_library(print STATIC /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/sources/print.cpp)
6 include_directories(/home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/include)
7 add_executable(example1 /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/examples/example1.cpp)
8 add_executable(example2 /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/examples/example2.cpp)
9 target_link_libraries(example1 print)
10 target_link_libraries(example2 print)
```



```
mat03@matveyVB: ~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib
CMakeLists.txt  formatter.cpp  formatter.h
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib$ cmake .
-- The C compiler identification is GNU 9.4.0
-- The CXX compiler identification is GNU 9.4.0
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working C compiler: /usr/bin/cc - skipped
-- Detecting C compile features
-- Detecting C compile features - done
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Check for working CXX compiler: /usr/bin/c++ - skipped
-- Detecting CXX compile features
-- Detecting CXX compile features - done
-- Configuring done
-- Generating done
-- Build files have been written to: /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib$ ls
CMakeCache.txt  cmake_install.cmake  formatter.cpp  Makefile
CMakeFiles      CMakeLists.txt      formatter.h
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib$ make
[ 50%] Building CXX object CMakeFiles/formatter.dir/formatter.cpp.o
[100%] Linking CXX static library libformatter.a
[100%] Built target formatter
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib$ ls
CMakeCache.txt  cmake_install.cmake  formatter.cpp  libformatter.a
CMakeFiles      CMakeLists.txt      formatter.h    Makefile
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_lib$
```

Задание 2.

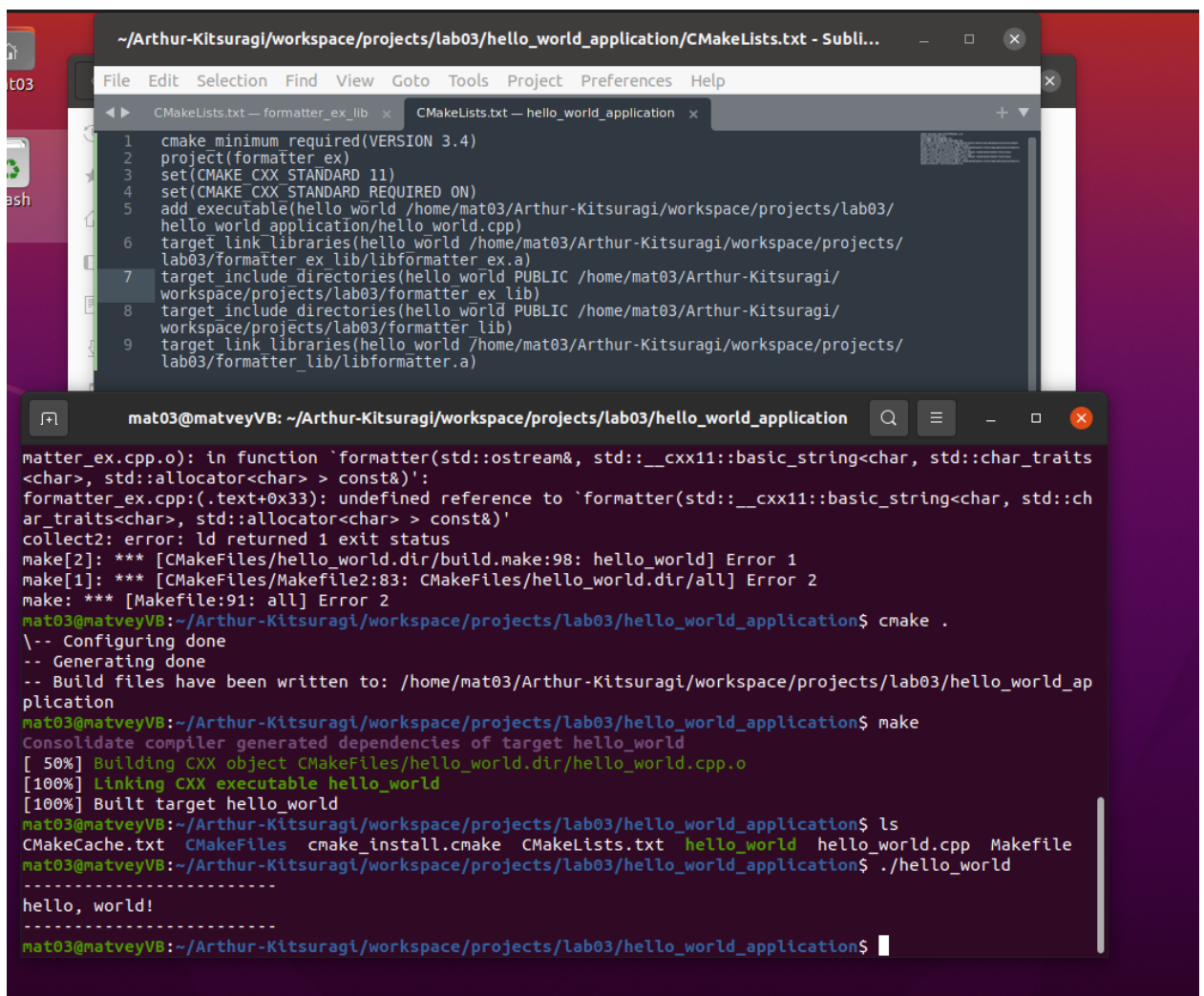
```
-- Configuring incomplete, errors occurred!
See also "/home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib/CMakeFiles/CMakeOutput.log".
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib$ cmake .
-- Configuring done
-- Generating done
-- Build files have been written to: /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib$ make
[ 50%] Building CXX object CMakeFiles/formatter_ex.dir/formatter_ex.cpp.o
[100%] Linking CXX static library libformatter_ex.a
[100%] Built target formatter_ex
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib$
```



```
~/Arthur-Kitsuragi/workspace/projects/lab03/formatter_ex_lib/CMakeLists.txt - Sublime Text...
File Edit Selection Find View Goto Tools Project Preferences Help

CMakeLists.txt
1 cmake_minimum_required(VERSION 3.4)
2 project(formatter_ex)
3 set(CMAKE_CXX_STANDARD 11)
4 set(CMAKE_CXX_STANDARD_REQUIRED ON)
5 add_library(formatter_ex STATIC /home/mat03/Arthur-Kitsuragi/workspace/projects/
6 lab03/formatter_ex_lib/formatter_ex.cpp)
7 include_directories(/home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/
8 formatter_ex_lib)
9 target_link_libraries(formatter_ex formatter)
10 target_include_directories(formatter_ex PUBLIC /home/mat03/Arthur-Kitsuragi/
11 workspace/projects/lab03/formatter_ex_lib)
```

Задание 3.



```
~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application/CMakeLists.txt - Subli...
File Edit Selection Find View Goto Tools Project Preferences Help

CMakeLists.txt — formatter_ex_lib x CMakeLists.txt — hello_world_application x
1 cmake_minimum_required(VERSION 3.4)
2 project(formatter_ex)
3 set(CMAKE_CXX_STANDARD 11)
4 set(CMAKE_CXX_STANDARD_REQUIRED ON)
5 add_executable(hello_world /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/
6 hello_world_application/hello_world.cpp)
7 target_link_libraries(hello_world /home/mat03/Arthur-Kitsuragi/workspace/projects/
8 lab03/formatter_ex_lib/libformatter_ex.a)
9 target_include_directories(hello_world PUBLIC /home/mat03/Arthur-Kitsuragi/
10 workspace/projects/lab03/formatter_ex_lib)
11 target_include_directories(hello_world PUBLIC /home/mat03/Arthur-Kitsuragi/
12 workspace/projects/lab03/formatter_ex_lib)
13 target_link_libraries(hello_world /home/mat03/Arthur-Kitsuragi/workspace/projects/
14 lab03/formatter_ex_lib/libformatter_ex.a)

mat03@matveyVB: ~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application
matter_ex.cpp.o): in function `formatter(std::ostream&, std::__cxx11::basic_string<char, std::char_traits
<char>, std::allocator<char> > const&)&':
formatter_ex.cpp:(.text+0x33): undefined reference to `formatter(std::__cxx11::basic_string<char, std::ch
ar_traits<char>, std::allocator<char> > const&)'
collect2: error: ld returned 1 exit status
make[2]: *** [CMakeFiles/hello_world.dir/build.make:98: hello_world] Error 1
make[1]: *** [CMakeFiles/Makefile2:83: CMakeFiles/hello_world.dir/all] Error 2
make: *** [Makefile:91: all] Error 2
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application$ cmake .
-- Configuring done
-- Generating done
-- Build files have been written to: /home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_ap
plication
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application$ make
Consolidate compiler generated dependencies of target hello_world
[ 50%] Building CXX object CMakeFiles/hello_world.dir/hello_world.cpp.o
[100%] Linking CXX executable hello_world
[100%] Built target hello_world
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application$ ls
CMakeCache.txt CMakeFiles cmake_install.cmake CMakeLists.txt hello_world hello_world.cpp Makefile
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application$ ./hello_world
.....
hello, world!
.....
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/hello_world_application$
```

The screenshot shows a Linux desktop environment with a purple background. A file manager window is open, displaying the contents of a `CMakeLists.txt` file. The file contains CMake configuration for a project named `solver_application`, including the minimum required version (3.4), project name, CXX standard (11), and various include and link directives for `solverlib` and `formatter_ex` libraries. Below the file manager, a terminal window is open, showing the execution of `cmake` and `make` commands, followed by the execution of the `./solver` program. The program output shows a discriminant calculation and the roots of a quadratic equation.

```
1 cmake_minimum_required(VERSION 3.4)
2 project(formatter_ex)
3 set(CMAKE_CXX_STANDARD 11)
4 set(CMAKE_CXX_STANDARD_REQUIRED ON)
5 include_directories(/home/mat03/Arthur-Kitsuragi/workspace/projects/lab03/-
  solver_application)
6 add_library(solverlib STATIC /home/mat03/Arthur-Kitsuragi/workspace/-
  projects/lab03/solver_lib/solver.cpp)
7 target_include_directories(solverlib PUBLIC /home/mat03/Arthur-Kitsuragi/-
  workspace/projects/lab03/solver_lib)
8 add_executable(solver /home/mat03/Arthur-Kitsuragi/workspace/projects/-
  lab03/solver_application/equation.cpp)
9 target_link_libraries(solver /home/mat03/Arthur-Kitsuragi/workspace/-
  projects/lab03/formatter_ex_lib/libformatter_ex.a)
10 target_include_directories(solver PUBLIC /home/mat03/Arthur-Kitsuragi/-
  workspace/projects/lab03/formatter_ex_lib)
11 target_include_directories(solver PUBLIC /home/mat03/Arthur-Kitsuragi/-
  workspace/projects/lab03/formatter_lib)
12 target_link_libraries(solver /home/mat03/Arthur-Kitsuragi/workspace/-
  projects/lab03/formatter_lib/libformatter.a)
13 target_link_libraries(solver solverlib)
```

```
mat03@matveyVB: ~/Arthur-Kitsuragi/workspace/projects/lab03/solver_application
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/solver_application$ ls
CMakeCache.txt  cmake_install.cmake  equation.cpp  Makefile
CMakeFiles      CMakeLists.txt      libsolverlib.a  solver
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/solver_application$ ./solver
4
3
2
-----
error: discriminant < 0
-----
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/solver_application$ ./solver
1
5
1
-----
x1 = -4.791288
-----
x2 = -0.208712
-----
mat03@matveyVB:~/Arthur-Kitsuragi/workspace/projects/lab03/solver_application$
```