TASK 1

下载安装了wsl2系统，在第一次下载过程中，按照csdn教程去做但是在转移系统位置到d盘时没有理解下图命令中**名称**和**版本**的所指的是什么导致没有成功转移

：**wsl --unregister 名称**，然后重新导入WSL并安装在目标盘：**wsl --import 版本 导入位置**

最后根据其它教程完成该任务 wsl系统由于没有图形化界面，使用不方便，所以自己在利用wsl系统完成了本次任务后，也会抽时间安装双系统

TASK 3

- 最常用命令位于bin目录下
- 创建文件并编译输出"Hello world！"过程如下

```
freshman@LAPTOP-1S0R07IP:~$ mkdir hlwl
freshman@LAPTOP-1S0R07IP:~$ cd hlwl
freshman@LAPTOP-1S0R07IP:~/hlwl$ touch helloworld.cpp
freshman@LAPTOP-1S0R07IP:~/hlwl$ nano helloworld.cpp
freshman@LAPTOP-1S0R07IP:~/hlwl$ g++ -o helloworld.cpp
g++: fatal error: no input files
compilation terminated.
freshman@LAPTOP-1S0R07IP:~/hlwl$ g++ -o hlwl helloworld.cpp
helloworld.cpp:1:9: fatal error: isotream: No such file or directory
    1 | #include<isotream>
      |         ^~~~~~~~~~
compilation terminated.
freshman@LAPTOP-1S0R07IP:~/hlwl$ nano helloworld.cpp
freshman@LAPTOP-1S0R07IP:~/hlwl$ g++ -o hlwl helloworld.cpp
freshman@LAPTOP-1S0R07IP:~/hlwl$ ./hlwl
Hello world!
```

TASK 4

- 文件目录

```
freshman@LAPTOP-1S0R07IP:~/hlwl$ ls
CMakeLists.txt  README.md  build  helloworld.cpp  hlwl
```

- CMakeLists.txt文件内容

- cmake过程 注意L大写

TASK 5

环境配置花费大量时间，遇到如下两个问题

- 报错：libcuda.so.1 is not a symbolic link
  发现自己做到这一步时系统装的有问题，重装一遍后问题消失
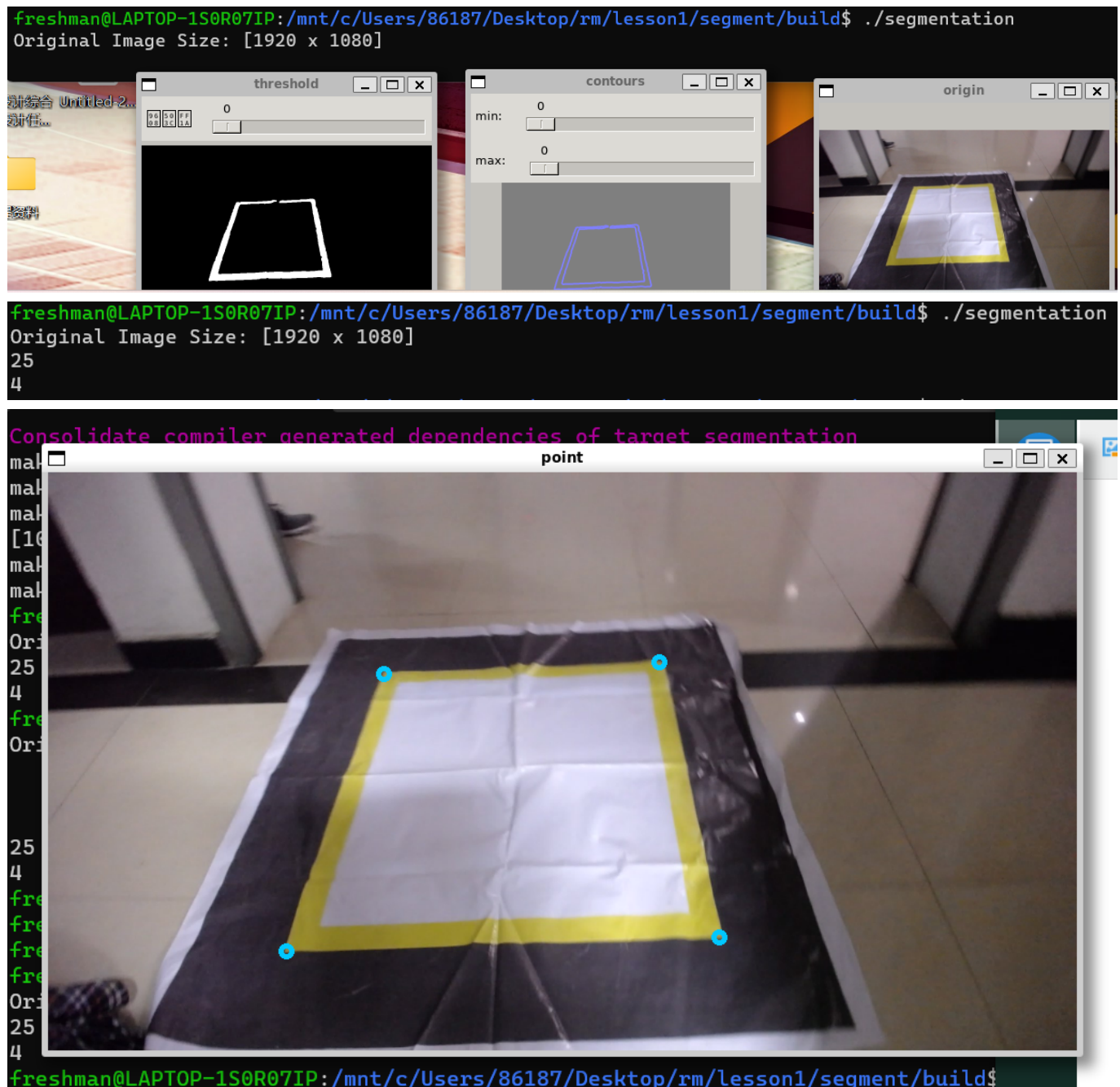- 找不到 opencv4.pc文件
  参考其它博客，cmake时配置如下

```
cmake -D WITH_TBB=ON -D WITH_EIGEN=ON -D OPENCV_GENERATE_PKGCONFIG=ON ..
cmake -D BUILD_DOCS=ON -D BUILD_TESTS=OFF -D BUILD_PERF_TESTS=OFF -D
```

```
        BUILD_EXAMPLES=OFF ..
        cmake -D WITH_OPENCL=OFF -D WITH_CUDA=OFF -D BUILD_opencv_gpu=OFF -D
        BUILD_opencv_gpuarithm=OFF -D BUILD_opencv_gpubgsegm=O
        cmake -D CMAKE_BUILD_TYPE=RELEASE -D CMAKE_INSTALL_PREFIX=/usr/local ..
```

后利用find ./ -name opencv4.pc 成功找到该文件位置,问题解决

TASK 6

程序结果如下：

cmake过程

```
freshman@LAPTOP-1S0R07IP:/mnt/c/Users/86187/Desktop/rm/lesson1/segment$ cd build
freshman@LAPTOP-1S0R07IP:/mnt/c/Users/86187/Desktop/rm/lesson1/segment/build$ cmake ..
CMake Deprecation Warning at CMakeLists.txt:1 (cmake_minimum_required):
  Compatibility with CMake < 2.8.12 will be removed from a future version of
  CMake.

  Update the VERSION argument <min> value or use a ...<max> suffix to tell
  CMake that the project does not need compatibility with older versions.


-- Configuring done
-- Generating done
-- Build files have been written to: /mnt/c/Users/86187/Desktop/rm/lesson1/segment/build
freshman@LAPTOP-1S0R07IP:/mnt/c/Users/86187/Desktop/rm/lesson1/segment/build$ make
make: Warning: File 'Makefile' has modification time 2013 s in the future
make[1]: Warning: File 'CMakeFiles/Makefile2' has modification time 2013 s in the future
make[2]: Warning: File 'CMakeFiles/segmentation.dir/progress.make' has modification time 2013 s
Consolidate compiler generated dependencies of target segmentation
make[2]: warning:  Clock skew detected.  Your build may be incomplete.
make[2]: Warning: File 'CMakeFiles/segmentation.dir/progress.make' has modification time 2012 s
make[2]: warning:  Clock skew detected.  Your build may be incomplete.
[100%] Built target segmentation
make[1]: warning:  Clock skew detected.  Your build may be incomplete.
make: warning:  Clock skew detected.  Your build may be incomplete.
freshman@LAPTOP-1S0R07IP:/mnt/c/Users/86187/Desktop/rm/lesson1/segment/build$ ./segmentation
Original Image Size: [1920 x 1080]
25
4
```

makelists.txt文件内容如下：

```
cmake_minimum_required(VERSION 2.8)
project(segmentation)
set(CMAKE_CXX_STANDARD 11)

find_package(OpenCV 4 REQUIRED)

include_directories(${OPENCV_INCLUDE_DIRS})
set(SOURCE_FILES src/main.cpp src/segment.cpp )


add_executable(segmentation ${SOURCE_FILES})
target_link_libraries(segmentation ${OpenCV_LIBS})
```