1) development environment and how to build dependencies

+) ubuntu-18.04.4-desktop-amd64.iso (Linux OS)

+) gcc/g++ 7.5.0 (with std::tr1 support for function, bind, shared\_from\_this, ...)

+) pthread (multi thread)

+) glog (debug logging)

+) gtest (googletest unit test)

+) valgrind (memory leak)

a) step 1: update ubuntu with command line:

sudo apt update

b) step 2: install gcc/g++ with command line:

sudo apt install gcc g++

c) step 3: libpthread.so is available in ubuntu 18.04.4 with path “/usr/lib/x86\_64-linux-gnu”

d) step 4: install glog with command line:

sudo apt install autoconf libtool make

tar xvf glog-0.4.0.tar.gz

cd glog-0.4.0/

./autogen.sh

./configure --prefix=$HOME/CocCoc/glog-0.4.0

make

make install

e) step 5: install gtest with command line:

sudo apt install cmake

tar xvf googletest-release-1.8.1.tar.gz

cd googletest-release-1.8.1/

mkdir mybuild

cd mybuild/

cmake ../ -DCMAKE\_INSTALL\_PREFIX=$HOME/CocCoc/googletest-release-1.8.1

make

make install

f) step 6: install valgrind with command line:

sudo apt install valgrind