

# Computer Programming

## Lab 10

- Final exam on Dec 14th, 2017

- Visual Studio c++ will not be used during grading for assignment and final exam.
- If you wish to use Visual Studio for lab session, you may do so, but you will have to make sure your program works on GNU or Clang for assignment and final exam.
- Code will graded under c++ 11 library, which you can compile with `-std=c++11` argument
- If you program with clang(mac) then please write comment at top of your program

# C++ for windows

- One of two for compiler

- Cygwin

- <https://www.cygwin.com/install.html>

- While installing, select c++ package

- <http://www.horstmann.com/cxx/help/cygwin/install.html>

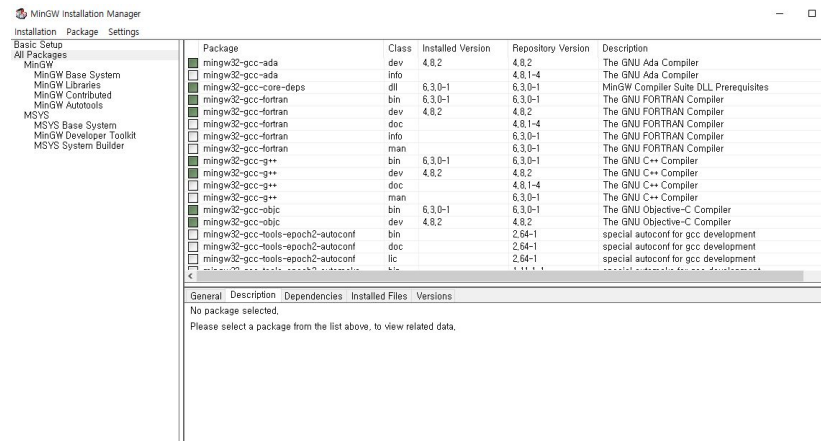
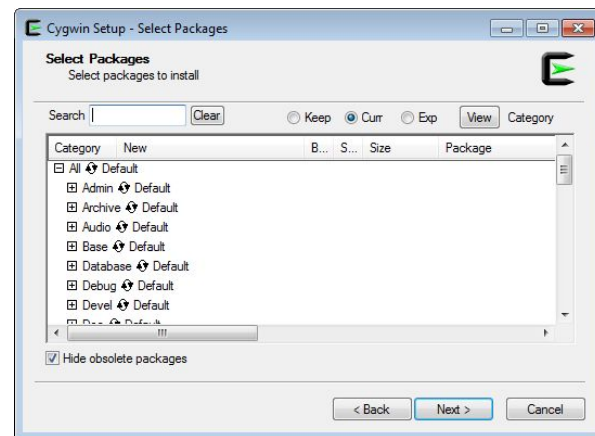
- MinGW

- <http://www.mingw.org/>

- Need to set path (default C:\MinGW\bin)

- Uses simple command prompt

- Make sure to install g++ while installing



# IDE

- Clion

- Requires Cygwin or MinGW
- <https://www.jetbrains.com/clion/>
- Free 30 day trials, and 1 year with student license
- <https://www.jetbrains.com/student/>

- Sublime

- If you wish to compile in Sublime
  - <https://www.acmicpc.net/blog/view/24> (in Korean)
  - <https://www.quora.com/Is-there-a-way-to-compile-and-run-C++-in-Sublime-Text> (English)

# Compile

- `g++ -std=c++11 {source}`
  - `a.exe`
- `g++ -std=c++11 {source} -o {output}`
  - `{output}`
- For CLion, it is default to `c++11`
  - You can check inside `CMakeList.txt`
  - `set(CMAKE_CXX_STANDARD 11)`

# Exercise 1

Write a program that parses words from a given string and outputs average length(rounded to 2 of all words and the number of total words. Assume words are delimited only by a blank.

e.g.) [input]: You again World!

[output]: Average Length: 4.67

# of words: 3

For show up to two decimal place

```
#include <iomanip>
```

```
cout << std::setprecision(2) << std::fixed;
```

If `string.find(string)` **failed**, then result equals `string::npos`