C++ PROGRAMMING

Getting Started

1. Free Integrated Development Environment (IDE) for C++:

Visual Studio 2017: https://visualstudio.microsoft.com/downloads/

Codelite: https://codelite.org/

Notepad++: https://notepad-plus-plus.org/

2. g++ compiler for Windows Power Shell:

MinGW: http://www.codebind.com/cprogramming/install-mingw-windows-10-gcc/

Remember to add **\MinGW\bin** to PATH under *Environment Variables.* To check if the compiler g++ and debugger gdb are ready to use, type the following commands in Power Shell:

g++ --version

```
PS C:\Users\VGU> g++ --version
g++.exe (tdm64-1) 5.1.0
Copyright (C) 2015 Free Software Foundation, Inc.
This is free software; see the source for copying conditions.  There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

gdb --version

```
PS C:\Users\VGU> gdb --version
GNU gdb (GDB) 7.9.1
Copyright (C) 2015 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.  Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-w64-mingw32".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word".
```

3. Make for Windows:

http://gnuwin32.sourceforge.net/packages/make.htm

Remember to add **\GnuWin32\bin** to PATH under *Environment Variables.* To check if Make works for Windows Power Shell, type the following command:

make --version

```
PS C:\Users\VGU> make --version
GNU Make 3.81
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There is NO warranty; not even for MERCHANTABILITY or FITNESS FOR A
PARTICULAR PURPOSE.
```