

## **Philippine National Olympiad in Informatics (PNOI 2008)**

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**Loyola Heights, Quezon City**

### **Computing Environment (Ateneo Computer Labs F223, F227, F228)**

#### **A. Computers for students and judges:**

##### **Hardware:**

Intel CPU, 1.8 - 2.4GHz speed

Memory 512MB

Disk: enough for students' programs

##### **Software:**

1. Windows XP with Service Pack 2
2. Text Editor: Notepad++ version 4.8.2
3. Java Compiler: Sun Java Compiler version 1.6.0
4. C/C++ Compiler: MinGW gcc version 3.4.5
5. Contest Software: PC<sup>2</sup> version 2.87

#### **B. Why PNOI does not have Dev-Cpp and JCreator IDEs:**

Dev-Cpp is an IDE (integrated development environment) for C and C++ programming. With Dev-Cpp, the programmer can do single-step source-level

debugging of C/C++ programs. Dev-Cpp will oftentimes compile C/C++ source code successfully, even if the program does not contain the proper

"#include" directives, because it auto-includes the directives that your

code needs. Unfortunately, the PC<sup>2</sup> judge program will fail to compile code that does not have the proper "#include" directives. Therefore, many

programs that work correctly inside Dev-Cpp will not even be compiled by

the PC<sup>2</sup> judge program, and the student submission will be marked wrong by the judge. A similar argument applies to Java programs in the JCreator IDE. To avoid these problems associated with the use of

Dev-Cpp

and JCreator, PNOI does not supply these two programs for student use.

### **C. Where to download these software:**

Most of these software are downloadable for free from the Internet. In case you want to download these, yourself, to install on your computer, so that you can practice with them, we are giving the URLs below, together with short installation instructions:

#### **Text Editor: Notepad++ version 4.8.2**

(<http://downloads.sourceforge.net/notepad-plus/npp.4.8.2.Installer.exe>)

#### **Java Compiler: Sun Java Compiler version 1.6.0**

Download jdk-6u5-windows-i586-p.exe from <http://java.sun.com/>

Install in C:\Program Files\Java\jdk1.6.0\_05

Put "C:\Program Files\Java\jdk1.6.0\_05\bin" in the PATH variable

#### **C/C++ Compiler: MinGW gcc version 3.4.5**

<http://downloads.sourceforge.net/mingw/gcc-core-3.4.5-20060117-1.tar.gz>

<http://downloads.sourceforge.net/mingw/gcc-g++-3.4.5-20060117-1.tar.gz>

<http://downloads.sourceforge.net/mingw/binutils-2.17.50-20060824-1.tar.gz>

<http://downloads.sourceforge.net/mingw/w32api-3.11.tar.gz>

<http://downloads.sourceforge.net/mingw/mingw-runtime-3.14.tar.gz>

<http://downloads.sourceforge.net/mingw/mingw32-make-3.81-2.tar.gz>

Install in C:\MinGW

Rename mingw-make.exe to make.exe

Put "C:\MinGW\bin" in the PATH variable

Put "C:\MinGW\include" in the INCLUDE variable

Put "C:\MinGW\lib" in the LIB variable

#### **Contest Software: PC<sup>2</sup> version 2.87**

(<http://www.ecs.csus.edu/pc2/code/v87/pc2v87.20071117.zip>)

The [TEST] button does not work.

To test your program, open a command window (cmd.exe) and compile and test your code there. You have to create your own test data.

Remember that when you make your submission, you need to submit source code, namely "yourprogram.c" or "yourprogram.cpp" or "yourprogram.java".