



The Hitchhiker's Guide to Using Java at the UCF High School Programming Tournament



Contest Conventions:

Each problem in this contest will have a file-name associated with it (printed at the top of the problem's specification, under the title). This file-name is used to name the file containing your solution's source code and the file you read input from. For example, if a problem's name is `problem`, your solution should be in a file named `problem.java` and read the problem's input from a file named `problem.in`. If you do not know how to open a file for input using Java file operations, this document will explain below. Your solution's output should be sent to standard out (please see below if this is unfamiliar). Any other input or output could result in your solution being judged incorrect, so stick to these guidelines. If you are a C or C++ programmer, please see the corresponding version of this document.

Only one class in your solution will have a `main()` function. Name this class with the filename of the problem, in all lower-case characters. For example, if you are solving a problem named `problem`, then your class definition should start like:

```
class problem {
```

Your class should be in the default package. This means **do not** specify a package with the `package` keyword. You may use inner classes, and specify more than one class in your source code, but you may not submit more than one source file for a problem.

Quick File I/O Tutorial:

To read in a file, you will construct a `BufferedReader` object. Here is template code:

```
BufferedReader stdin = null;

try
{
    stdin = new BufferedReader (new FileReader ("problem.in"));
} catch (Exception e) { }
```

You can now read in one line at a time via the `readLine` method:

```
String line1 = null;

try
{
    line1 = stdin.readLine ();
} catch (Exception e) { }
```

When you reach end-of-file, `readLine` will return `null`. You may find it useful to do something inside the `catch's {}`-block for debugging purposes. Remember to `import java.io.*`; in the top of your program.

Output to the Standard Output Stream:

You should print to standard out using the `print`, `println` or `printf` function. In this contest, you should only print to standard out. Do not write to files.

```
int i;
double d;
string s;
...
System.out.println("Hello World");
System.out.printf("%d %0.3lf %s\n", i, d, s);
```