

Brief Intro to User Input/Output for Challenge Problems

Java – Console I/O (i.e. keyboard input & screen output) is the expected form of input/output. Use **System.out.println** (or **System.out.print**, as appropriate) for output. The following information may be useful to implement keyboard input:

1. First, make sure that the following “import” statement is included at the very top of the code: **import java.io.*;**
2. Before doing any keyboard input, declare a **BufferedReader** object (named “**br**” in the following example) tied to **System.in**:

```
BufferedReader br =  
    new BufferedReader( new InputStreamReader( System.in ) );
```

3. Use this object to read Strings (one line at a time) from the keyboard; for example:

```
System.out.println("Enter one line of input:");  
String s = br.readLine();  
System.out.println("Enter another line of input:");  
String t = br.readLine();
```

The above fragment would read two lines from the keyboard; s references the String that is the first line of input, while t references the second line.

4. Use **Integer.parseInt** or **Double.parseDouble** to convert any Strings to ints or doubles, respectively. Reading a line of input and converting it to a numeric type can be done in one statement; for example:

```
int i = Integer.parseInt( br.readLine() );
```

5. Finally, any methods that contain a call to `readLine` (as well as methods that call a method that calls `readLine`, etc.) need a “**throws Exception**” clause in the method header. For example:

```
public static void main( String[] args ) throws Exception {  
    ... // call to readLine somewhere in here }
```

MIT OpenCourseWare
<http://ocw.mit.edu>

EC.S01 Internet Technology in Local and Global Communities
Spring 2005-Summer 2005

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.