

COMPUTER PROGRAMMING IN JAVA

COLUMBIA UNIVERSITY HIGH SCHOOL SCIENCE HONORS PROGRAM

Introduction
Assignment
2008 Feb 02 Sat

Remember your assigned username/password! Ask me if you don't know.

To access the two programs (WinSCP, a file transfer program, and PuTTY, a command-line client), go to the folder labeled "Applications" on the desktop.

If you want to access your account from home, download the programs from the homepage. The name of the server is:

cunix.cc.columbia.edu

Let me know if you have any problems.

WinSCP

- Right-click, edit!
- Use this program to
 - Create new directories
 - Create new files
 - Delete old files

CUNIX tutorial/PuTTY

Note the prompt, for example:

```
hssh8 ~ #
```

The first one is your username, the second one is the current directory ('~' means home).

Basic commands

- `ls -l`
 - Shows a Listing of the current files
 - Note the color-coding
 - White means file, blue means directory
- `cd`
 - Changes into a directory
 - E.g.:

```
cd week1  
cd "Week 01"
```
 - To go "up" the directory hierarchy

```
cd ..
```
- `javac`
 - Compiles a Java source file into a Java bytecode file
 - E.g.:

```
javac Hello.java
```
 - Remember that you need to give the complete filename
 - The name of the class must be the same as the name of the file
- `java`
 - Executes a Java bytecode file
 - E.g.:

```
java Hello
```

For a more in-depth tutorial, see the links on the main page.

Tasks

1. Create a new file "Hello.java", compile it, and execute it.
2. Create a new file "InteractiveHello.java", compile it, and execute it.
3. Create a new file "Calculator.java", compile it, and execute it.
4. Write a program called DegreeConverter, that takes in a degrees Fahrenheit, and prints it as degrees Celsius. Then do the conversion the other way (Celsius => Fahrenheit). A template has been provided for you.
5. Write a program called ToSeconds, that takes in a number of days, hours, minutes, and seconds, and prints out the total number of seconds. A template has been provided for you.
6. Write a program called FromSeconds, that takes in a number of seconds, and prints out the total number of days, hours, minutes, and seconds. A template has been provided for you.