

An Introduction to UNIX and Java

Purpose:

To become familiar with the laboratory work-stations, and in particular to learn (a) basic UNIX commands, and (b) how to compile a simple JAVA program.

Due Date:

For this first assignment there is nothing to hand in. You should send an e-mail message to me (casper@unbc.ca) as described below by the end of the lab period.

Absolutely Basic UNIX

Your lab instructor will teach you enough that you should be able

- to log on to a machine in 8-456,
- to find out what directory you are currently in and change directories,
- to create and remove directories, and
- to create and remove files.

Your lab instructor will also explain the basics of how to use an editor called `nedit`. (There are several editors available including `vi`, `emacs`, `xemacs`, and `pico`. You may use whichever you feel comfortable using.)

Compiling and running a JAVA program

Create a directory `Hello` that is initially empty.

In the `Hello` directory, create a file called `Hello.java` that contains text that looks exactly like that shown in Figure 1.

Type the command

```
javac Hello.java
```

in a shell window to compile your program. If your program is correctly entered you should get no error messages and `ls` should show the existence of a file called `Hello.class` as well as `Hello.java`.

To run your program, type

```
java Hello
```

It should respond with “Hello world!” and then another line. Make sure that you are able to compile and run this simple program by the end of the lab.

```
/** A simple program.
 */
public class Hello
{
    public static void main (String[] args)
    {
        System.out.println("Hello World.");
        System.out.println("The mystery word is \"\u004D\u0044\".");
        return ;
    }
}
```

Figure 1: Sample “Hello.java” file

JAVA programs and Documentation

Use Firefox or your favourite web browser to look at the JAVA documentation <http://java.sun.com/javase/6/docs/api/> . Look around a bit at the various different links that can be clicked on.

To see how this documentation can be created, run the command

```
javadoc Hello.java
```

You should find that there are many more files in your directory now. Look at the file `Hello.html` using Firefox or your favourite web browser. Try changing the very first line of `Hello.java`, and then re-run

```
javadoc Hello.java
```

to see what has changed.

Once you have compiled your program and have it running, your lab instructor will show you how to use

- the `script` to record exactly what you have done,
- the `scriptfix` command to clean up your script files, and
- the “`enscript -2rG`” command to print your script file.

In the future, you will hand in printed script files when you have completed a lab. Please hi-light your name (and *only* your name) before you hand it in. *Do not hand in your Hello.java program.*

e-mail

In 2001, part of this lab was learning how to use an e-mail program.

Now, most people have their own favourite way to send e-mail. Make sure that you know how to access your UNBC e-mail account. Ask your lab instructor for help if you cannot access e-mail from the lab.

- ⇒ Send a message to your lab instructor and to me (casper@unbc.ca) with (a) your name, (b) your student number, (c) the mystery word from the program, and (d) which lab section you are in.