

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 or 8-457,
- 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

```
/** 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 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.

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/>.¹ 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.

¹or possibly
<http://java.sun.com/javase/7/docs/api/>.

In the future, you will hand in printed script files when you have completed a lab. Please highlight 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.