

# 1001ICT Introduction To Programming 1 2013-2

## Laboratory 1

School of Information and Communication Technology  
Griffith University

July 19, 2013

<i>When</i>	Teaching week 2
<i>Goals</i>	In this laboratory class you will meet the laboratory demonstrator and the rest of the class, learn a little DOS/Unix, compile, run and modify MaSH programs, and complete your workplace health and safety training.
<i>Marks</i>	2

## 1 Preparation

Before your lab class:

- Print these lab notes. You need to refer to them *a lot* before the lab class and during it.
- Make sure you are properly enrolled and have access to the PC lab where your class is held and that you can log into those PCs.
- Read all of this document.
- Review the lecture notes sections 1 to 3.
- Read the lecture notes appendices A to G.
- Ensure that you have completed the workplace health and safety training and test on Learning@Griffith, *within the last year*. Print the certificate and bring it to your lab class.
- Complete the pre-laboratory questions.

## 2 Pre-laboratory questions (0.5 marks)

Answer the following questions in the space provided, *before your laboratory class*. They will be marked at the *start* of the class.

1. The name of a MaSH source file ends in . \_\_\_\_\_.
2. The command to compile a MaSH program to Java (doing nothing else) is \_\_\_\_\_.
3. The name of a Java source file ends in . \_\_\_\_\_.
4. The command to compile a Java program (doing nothing else) is \_\_\_\_\_.
5. The output from the Java compiler is stored in files that end in . \_\_\_\_\_.
6. The command to run an already compiled java program is \_\_\_\_\_.

7. The shortcut Windows batch file that does all of the above steps is \_\_\_\_\_.
8. The shortcut `bash` script that does all of the above steps for Mac OS X or Linux is \_\_\_\_\_.

## 3 Laboratory activities

### 3.1 Introductions

- We will conduct a short activity that will help you get to know the other members of the class.

### 3.2 Workplace health and safety check (0.5 marks)

- If you have not already, complete the required workplace health and safety test before the end of this class, so that we can record it, and give you half a mark.
- If you can't find the test on Learning@Griffith, the tutor can help you find it.
- If you don't complete the test in time, you will still need to show proof next week, but you won't get any marks.

### 3.3 Console program 1

This activity is to verify that you can use the lab computer to compile and run a MaSH program. You may complete this on either Mac OS X or Windows, depending on how your lab is equipped.

- Download the file `Hello.mash`.
- Compile and run the program as per the instructions in the lecture notes. (Remember there is a shortcut batch file/script that makes it easy.)

### 3.4 Console program 2 (0.5 marks)

This activity verifies that you can modify a program with a text editor and run it.

- Modify `Hello.mash` so that it prints the words with a box around them like this:

```
+-----+
| Hello, World! |
+-----+
```

- Hint: Use a text editor, for example JCreator or Notepad++ on Windows, or TextWrangler on Macs.
- Show your program and its output to your tutor.

### 3.5 Console program 3 (0.5 marks)

This problem will be revealed during the laboratory class.

### 3.6 Extra activities

- If the lab you are in is equipped with dual-boot Macs, repeat the activities on the OS you did not use above.
- It is not required that you have your own computer at home, but if you do, why not equip yourself with the software so that you can practice programming at home? The course home page has links to MaSH and Java resources. Appendices E and F of the lecture notes are instructions installing Java and MaSH. All of the editors we have mentioned above are free and available for download on the internet. If you have questions about installing or using these packages, the common times are the best place to ask. Bring your laptop.

## 4 After the Laboratory

- Organize the work you have done into folders on your network drive.