

Lab lecture exercises – Week 1

- (a)
 - (i) Log-in.
 - (ii) Open a Terminal.
 - (iii) Type **module load msc-sw**. Then press the **return (enter)** key.
 - (iv) Type **auto-load-msc-sw-modules**. Then press the **return (enter)** key.
 - (v) If you have not created it last Friday, create a new directory called **SWW** by typing in the terminal **mkdir SWW** (“make directory”). Then press the **return (enter)** key.
 - (vi) Make the **SWW** directory to your working directory by **cd SWW** (“change directory”).
 - (vii) Create a new directory called **lab01** by typing in the terminal **mkdir lab01** (“make directory”). Then press the **return (enter)** key.
 - (viii) Make the **lab01** directory to your working directory by **cd lab01** (“change directory”).
 - (ix) Edit a file **HelloWorld.java** by invoking an editor of your choice, e.g., by **gedit HelloWorld.java &**. Note that the “&” at the end means that the shell can be used for other input. We say that the **gedit** process is moved to the background and we can run several processes in parallel in a single terminal.
 - (x) Insert text into the editor, e.g., by copying the file from the module web page at <https://birmingham.instructure.com/courses/38428>.
 - (xi) Save the file (in gedit by pressing the “Save” button).
 - (xii) Compile the file in the terminal by typing **javac HelloWorld.java**.
 - (xiii) Run the program by typing **java HelloWorld**.
 - (xiv) Extract the documentation by typing **javadoc HelloWorld.java**.
- (b) Write a class **Rectangle.java** which contains a method to compute the area, **public static double area(double width, double height)** of rectangles with sideline lengths **width** and **height**. Test your program with **width = 4** and **height = 5**. Print the result in a suitable form.