Assignment Part 3/3: UNIX Operating System and Working with Basic Unix Commands

COMP502 Foundations of IT Infrastructure Semester 1, 2017

Semester 1, 2014

Contribution to final mark: 15%

**Due: 23:59 pm, Sun. 28 May 2017 (AUT calendar week 11).**

Late penalty: Late submissions will be penalised at 5% of the actual assignment mark for every calendar day. E.g. assignments submitted 5 minutes late are penalised as one day late. Late work of 5 or more days will not be marked.

**Miscellaneous requirements:**

* Assignment will not be marked if:
  + It contains any form of malware (e.g. computer virus)
  + Submitted in non-requested compression format (e.g. 7zip, rar, …)
  + Not submitted in correct file format (see section: REPORT SUBMISSION INSTRUCTION)
* Keep a backup copy of your assignments to be:
  + uploaded to *“TurinItIn”* anti-plagiarism service – if requested.
  + submitted as a hard copy – if requested.

ASSIGNMENT AIM

This assignment will help you understand how to install multi-operating systems using VirtualBox and comparatively evaluate the Operating System (OS) of your choice.

This assignment is also prepared for students to understand the basic concepts covering UNIX file systems, UNIX commands, and UNIX working environments.

INSTRUCTION

The assignment requires the use of VirtualBox, which should be installed on every machine in the lab. If you would like to install VirtualBox on your own machine, you can download it at <https://www.virtualbox.org/>.

To answer the following questions, you have to include:

* **The text or screen-shots of command(s) that you type** to perform a task.
* **The text or screen-shots of any console output** from those commands (the output from a directory listing, for example).
* Make sure that you include ALL commands you used to do a task. This includes any commands you have to type to move to a specific directory. Make sure **your pasted texts** or **screen-shots** are clear enough to showing where you are or have moved to.

**Question 1: Setting up a Linux operating system (20 marks)**

Obtain your own **copy of mandatory Linux** distribution. You can download any ISO image from the Internet (at - <http://linuxlookup.com/linux_iso> or <http://virtualboxes.org/images>). Once you get a copy of an ISO image, you can install it on Virtual Box (following what you have learnt in the lab).

1. Choose and install any two of the Linux operating system and **display some screen-shots** of your installation, include **your name and ID** in at least one of the screen shot. (10 marks)
2. Briefly describe the two Linux operating systems that you just installed, **which one do you like** better and why? (10 marks)

**Question 2: Manipulate directory structures in Unix/Linux (40 marks – 5 marks each)**

Use the operation system that you set up from Question 1. Assume you are started at your home directory.

1. Perform a command that displays the absolute path of your **home** **directory** (your current location).
2. Create a new directory inside your home directory and name it **FTIT-hw1**
3. Without moving into the directory you just made (staying in your home directory), create two new directories using **one** **command** inside of the **FTIT-hw1** directory, and name them **assign1** and **assign2**.
4. Now, navigate to the **FTIT-hw1** directory.
5. Create two new files without opening any text editor using **one command** inside of the **FTIT-hw1** directory, and name them **file1** and **file2**.
6. Display the contents of your current working directory (the directory **FTIT-hw1**).
7. Delete the directory **assign2**.
8. Display the contents again of the directory **FTIT-hw1**, this time using the long listing format.

**Question 3: Manipulate files in UNIX (40 marks – 5 marks each)**

Assume you are started at your home directory again.

1. Create directory **FTIT-hw2** and change your current working directory to **FTIT-hw2**. (Stay in this directory for the rest of the steps in question 3)
2. Create a new directory called **assign3** in your current working directory.
3. Create 7 new files using ONE COMMAND (in directory **FTIT-hw2**) named as follows:
   * *unix.txt*
   * *thisStuff.bak*
   * *wumbo.file*
   * *wumbology.txt*
   * *moreThings.woot*
   * *doodad.text*
   * *coursetxt*
4. Display a listing of all the files and directories in the current working directory.
5. Display a listing of all the files in the current working directory ending with **txt** using one command.
6. Display a listing of all the files in the current working directory starting with **u** and ending with **t** using one command.
7. Copy all the files containing "**wumbo**" to the directory **assign3** using one command.
8. Display a listing of the contents of the directory **assign3**, without navigating to the directory.

# SUBMISSION INSTRUCTION

The assignment has to be submitted on BlackBoard in soft copy at: **Assessments > Current Assessments > Assignment Part 3/3: UNIX Operating System and Working with Basic Unix/Linux Commands**.

Create a PDF version of your assignment and name it as **LAST\_NAME\_Student-ID.pdf**. Then upload it to AUT ONLINE / BlackBoard.

Note that RAR, 7zip or virus contaminated files will not be marked (automatic failure)