## **Unix/Linux Tutorial for Beginners**

Session I – Unix & File Formats

## Mandatory exercises

- 1. Which of the following statements are true?
  - a) The term Unix is used for a family of computer operating systems that derive from the original AT&T Unix.
  - b) Unix/Linux can run several programs simultaneously, although only one user can be connected at a time.
  - c) Nowadays the command line interface is still in use as there are tasks that simply can't be done with a graphical user interface.
  - d) Unix/Linux can run several programs simultaneously, and manage several users at the same time.
- 2. A graphical user interface (GUI)
  - a) can't be used simultaneously with a command line interface.
  - b) provides windows, icons and menus, which the user can use to send commands to the computer.
- 3. In Unix/Linux CLI is used as acronym for
  - a) Children's Learning Institute
  - b) Command Line Interface
  - c) Critical Limb Ischemia
  - d) Command Line Interpreter
- 4. What is a SHELL in Unix/Linux?
  - a) Is a program that takes commands from the keyboard and gives them to the operating system to perform.
  - b) Is a British–Dutch multinational oil and gas company.
  - c) Is a program that mediates between the user and the operating system.
  - d) Is a user interface for access to an operating system's services.

- 5. What are the components of an operating system?
  - a) Memory management, device management, data security, user interface.
  - b) Kernel, system utilities, and user interfaces.
  - c) Graphical user interface and command-line interface.
  - d) BIOS, MBR, GRUB, Kernel, Init, and Runlevel.
- 6. How does the syntax of a Linux command look like?
  - a) command {options} [arguments]
  - b) command {options|arguments}
  - c) command [options] [arguments]
  - d) command < options > < arguments >
- 7. What is BASH in Unix/Linux?
  - a) Bird Aircraft Strike Hazard deals with the impacts associated with bird strikes by aircrafts.
  - b) The command line terminal is one of the most powerful tools available to you in a computer. It can run complex commands that can manipulate the existing file structure, download from remote sites, etc.
  - c) Bikers Against Statewide Hunger is an organisation that fights against hunger.
  - d) The Bourne Again SHell is the default shell for most systems running Linux.
- 8. What does the command *man* do?
  - a) It translates the command arguments in Mandarin.
  - b) It is the interface used to view the system's reference manuals.
  - c) It provides access to the military analysis network.
  - d) It formats and displays the on-line manual pages for almost any Linux commands.

## **Optional exercises**

- 1. What is the difference between Unix and Linux?
  - a) There is no difference.
  - b) Unix is (mostly) a proprietary OS originated from the Bell laboratories, while Linux is a free, open-source, and non-proprietary OS.
  - c) Linux was developed for personal computers, while Unix was primarily for large workstations and servers.
  - d) Linux kernel is developed by the community, while Unix is manufactured by Solaris, AIX (IBM), HP-UX Hewlett Packard, and Apple.

- 2. What are the benefits of Linux?
  - a) Difficult, pricey, prone to viruses, less available software, high customization.
  - b) Open-source, stable, secure, fast, networking, multi-user, multi-tasking.
  - c) Runs Windows programs, single-user, single-processing, real time.
  - d) Freedom, stability, network friendliness, security, reliability, flexibility, performance, multi-tasking.
- 3. What is a Linux terminal?
  - a) It is part of a structure, end or extremity.
  - b) It is the area or building at a station, airport, or port that is used by passengers to embark or disembark.
  - c) It is a program called terminal emulator, which opens a window and lets you interact with the shell.
  - d) It is the point at which a connection can be made in an electric circuit.
- 4. What is a file format?
  - a) It is a folder or box for holding loose papers together.
  - b) A file format defines the structure and type of data stored in a file.
  - c) A file format is the shape and size of a paper.
  - d) It is the organization, plan, style, or type of something.

Exercises are in part derived by material from ©Software Carpentry (http://software-carpentry.org, license: CC BY 4.0) that was adapted from me for this course.

Another part is from a BILS course given by Martin Dahlö and used here by his kind agreement. Remaining exercises by M. Martis.