

Diagnostic test – DO2003

(* = not primarily)

1. Explain the terms "absolute path" and "relative path". Exemplify the two types.
2. In which folder should you look for
 - a. configuration files
 - i. for the system
 - ii. for a specific program
 - b. files on a certain users desktop (e.g., user alfa)
 - c. the administrators files
 - d. logs
 - e. * kernels and boot manager
 - f. * information about processes
3. Show schematically in a single diagram how the following distributions are related
 - a. CentOS
 - b. Debian
 - c. Fedora
 - d. Knoppix
 - e. RedHat
 - f. Ubuntu
4. Explain and exemplify how the following commands are used
 - a. cd
 - b. ls
 - c. cp
 - d. rm
 - e. man
 - f. mkdir
 - g. sudo
 - h. cat
 - i. more
 - j. nano
 - k. grep
 - l. passwd
 - m. adduser
 - n. lsmod
 - o. lspci
 - p. ifconfig
 - q. shutdown
 - r. * chown
5. Give one example of redirection to a file and explain what happens
6. Give one example of pipes and explain what happens
7. Explain how to do the following in vi
 - a. open a file
 - b. close a file without saving it
 - c. close a file and saving it
 - d. remove a character
 - e. insert a character (e.g, c)

8. Explain the difference between command mode and edit mode in vi
9. For the command chmod, explain
 - a. how to use the command
 - b. the difference between access rights for folders and files
 - c. access rights 755
 - d. access rights 644
 - e. access rights 700
 - f. * access rights 000
10. Show and explain how you could use mount to mount
 - a. a hard drive partition (e.g. /dev/hda3)
 - b. a cd-player (e.g., /dev/sdc)
 - c. a net disk
 - i. of the type nfs
 - ii. * of the type smbfs
11. Explain, for apt-get, how to
 - a. upgrade all installed packets
 - b. install a specific packet
12. Explain how to start a program (e.g., firefox) in the background
13. Explain how to terminate a program that executes in the background
14. * Explain how to start a program in the background that will not be affected by the signal HUP and explain what this means
15. Explain how to generally restart a server or service, e.g., after a reconfiguration or a crash
16. Show how to archive and compress all files and folders in a certain folder (e.g., /tmp/collection) and explain where it ends up
17. Show how to unpack a tgz-archive (e.g., nano.tgz) in the folder /tmp
18. Explain how to perform a remote login to a computer (e.g., remote.hh.se) with a given user (e.g., alfa)
19. Explain what basic configurations that are needed to either perform or to check when you install a web server
20. Explain what basic configurations that are needed to either perform or to check when you install a database server

Estimated number of Linux users today:

29.000.000