

Dear students

Your book is your main source of information, however additional work is provided when applicable to provide extra information, examples or help with understanding. The extra reading is references to websites on the Internet so you will have to access the internet.

Remember that Linux uses two different shell prompts. These are a dollar (\$) sign if you are an ordinary user or a hash(#) in case of a root user.

When you type a command in a shell, there is a sequence of checks that are performed before it is executed. This is done in specific order.

When typing something in a shell, it is not always required to type the whole command. You can provide the first few characters and then press *tab* to autocomplete. Your first few characters may be regular characters, a \$-sign, a ~-sign or an @-sign. Refer to your book to see where autocomplete gets the information to autocomplete what you typed from.

It is sometimes handy to have a way to execute commands in sequence. This can be accomplished using *troff*. Refer to your book for an example where it used to format a large document and finding out how long it took. You must do additional reading about troff in your installation's man-pages or here <http://www.computerhope.com/unix/utroff.htm>.

The bash prompt is very customizable. By setting the environment variable PS1 to a specific string you can design your own prompt. Read the text book to learn what to include in the string to get what you want. Some examples are here <http://www.linuxnix.com/linuxunix-shell-ps1-prompt-explained-in-detail/>.

Metacharacters can be used to redirect data. Read more in your textbook and here <http://www.angelfire.com/mi/genastorhotz/reality/computers/linux/bashmetachars.html>

Default file permissions can be set using umask. Refer to the book. Work through the example and be sure to read this <http://www.cyberciti.biz/tips/understanding-linux-unix-umask-value-usage.html> so that you can understand how umask is calculated. The default can be changed permanently by adding a umask command to the .bashrc file in your home directory.

Permissions may be changed using `chmod`. Refer to the book. Be sure that you master both the number and letter version. More detail and examples are here <http://www.thegeekstuff.com/2010/06/chmod-command-examples/>.

The `vi` editor has a number of 1-character commands. Knowing those commands and what they do is an important skill. Be very aware that both upper and lowercase is used, but the commands do not perform the same function and differences are sometimes subtle like with `I` and `i`.

The `nice` value for process is one of the deciding factors when CPU-time is allocated to process. The possible values are -20 through 19. The nearer to the negative end of the scale the more CPU-time will be allocated. The default is 0. Note that not everybody can assign any value, see the textbook for the exact details. It is very important that you know this.

Since shell scripts are often used, detailed knowledge about them is important. Study them so you know every single one as well as what it does. Come up with a way to make it easy to remember them, like a table with the operator and a brief description of what it does.

The `-V` (verify) option in `rpm` is used to verify packages. See the book for an example of the output that is generated by a `rpm` command with the `-V` option. You must be able explain what information you get from such an output.

Group names can be manipulated meaning they can be created and changed. Be sure you know the two examples in the book. Please read <http://www.computerhope.com/unix/groupadd.htm> to help you understand and be aware of the options and their meaning.

User account can be changed through the use of the `usermod` command. What aspect of the account is changed depends on the option specified. There is a list of options on page 260 and 261 that are important to know by heart.

At some point you will have to install software when you use Linux. To this end there are managers like `yum`, `RPM` and others. Knowing how to deal with downloads, removing packages and dependencies are very important.

The installation of a new storage medium is a task performed regularly and in a specific sequence. Make sure you know the sequence.

Access control list permissions are set by setfacl. You must be able to explain a command *like* `setfacl -mg:reception:rx /tmp/memo.txt` in detail. See the examples in the book and study them in detail and also read <http://thegeekdiary.com/unix-linux-access-control-lists-acls-basics/>.

A SWAP area is partition on the disk that is used to emulate ram. You need to know how to enable or the SWAP on, make it available permanently and turn it off.

It is possible that more than one file system type is available in your kernel. Read the book regarding the file systems that are supported. You determine which is available in the kernel with the `cat` command. Be sure to know the full syntax of the command.

Linux has a huge number of commands and it is not possible to know all of them. Refer to the guidelines for some useful commands that you need to know.

You are again reminded to read the notes in conjunction with the guidelines.

I wish everybody the best for the examination.