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DevOps Master's

ASSIGNMENT 3

Ques. 1. What is tar command? Why is it used?

Answer: The tar command is a utility used in Unix-based operating systems for archiving and compressing files. It creates a single archive file from multiple files and directories, making it easier to transfer or backup the data. The archive file created by the tar command can be compressed using gzip, bzip2, or other compression tools, reducing its size for efficient storage and transfer. The tar command is also used to extract the files from an archive, preserving the original file and directory structure.

Ques. 2. Explain Regular Expressions and Grep

Answer: Regular Expressions (also known as "regex" or "regexp") are a sequence of characters that define a search pattern. They are used to match and manipulate strings, especially in text processing. Regular expressions are supported by many programming languages, text editors, and command-line tools, such as grep.

grep is a command-line utility that searches for a pattern in a given input text and outputs the lines that match the pattern. The pattern is specified using a regular expression. **grep** is commonly used for searching for specific words or phrases in large amounts of text or log files. The syntax for using **grep** is:

grep [options] PATTERN [FILE...]

where PATTERN is the regular expression to search for and FILE... is one or more files to search. The options can be used to modify the behaviour of the grep command, such as ignoring case, printing only the file names, etc.

Ques. 3. What is the minimum number of disk partitions required to install Linux?

Answer: The minimum number of disk partitions required to install Linux is two:

/ (root) partition: This is the main partition where the core files of the operating system are stored, including the system libraries, configuration files, and user home directories.

swap partition: This partition is used as virtual memory and serves as an extension of the RAM. When the system runs out of RAM, it uses the swap partition as temporary storage.

Ques. 4. How to copy a file in Linux?

Answer: In Linux, the cp command is used to copy files and directories. The basic syntax for using the cap command is:

cp [OPTION..] SOURCE DESTINATION

where SOURCE is the file or directory you want to copy, and DESTINATION is the location where you want to copy the SOURCE.

Ques. 5. How to terminate a running process in Linux?

Answer: In Linux, you can terminate a running process using the kill command. The basic syntax for using the kill command is:

kill [OPTION PID]

where PID is the process ID of the process you want to terminate.

Ques. 6. How to rename a file in Linux?

Answer: In Linux, you can rename a file using the mv command. The mv command is used to move files and directories, but it can also be used to rename a file by moving it to the same directory with a different name.

The basic syntax for using the mv **c**ommand to rename a file is:

mv OLDFILENAME NEWFILENAME

where OLDFILENAME is the name of the file you want to rename, and NEWFILENAME is the new name you want to give the file.

Ques. 7. How to write the output of a command to a file?

Answer: In Linux, you can write the output of a command to a file using the > operator. The > operator redirects the output of a command to a file, overwriting the contents of the file if it already exists.

The basic syntax for using the > operator is:

COMMAND>FILENAME

Where COMMAND is the command, you want to run, and FILENAME is the name of the file you want to write the output to.

Ques. 8. How to see the list of mounted devices on Linux?

Answer: In Linux, you can see a list of mounted devices using the mount command. The mount command displays a list of all mounted file systems and the options used to mount them.

Ques. 9. How to find where a file is stored in Linux?

Answer: In Linux, you can find where a file is stored by using the locate or find command.

Ques. 10. How to find the difference between two configuration files?

Answer: In Linux, you can find the difference between two configuration files using the diff command. The diff command compares two files and displays the differences between them, including added and deleted lines.

The basic syntax for using the diff command is:

diff FILE1 FILE2

where FILE1 and FILE2 are the names of the two files you want to compare.