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**LAB SESSION 08**

**QUESTION 01:**

Explain what the following commands do (with examples) and practice them:

• Lockfile: Creates or updates a lock file to signal that a process is using a particular resource. Example: `lockfile /tmp/mylockfile`

• cksum:Generates a CRC checksum for a file. Example: `cksum file.txt`

• comm: Compares two sorted files line by line. Example: `comm file1.txt file2.txt`

• csplit:\*\* Splits a file into sections based on context lines. Example: `csplit file.txt '/pattern/'`

• chattr:\*\* Changes file attributes on a Linux file system. Example: `chattr +i myfile.txt`

• touch:\*\* Updates the access and modification times of a file or creates an empty file. Example: `touch newfile.txt`

**QUESTION 02:**

What do the following do:

• `cat ch1`: Displays the contents of the file named ch1.

• cat ch1 ch2 ch3 > “GROUP 1”`: Concatenates the contents of ch1, ch2, and

ch3 into a new file named GROUP 1.

• cat note5 >> notes`: Appends the contents of note5 to the file named notes.

• cat > temp1: Creates an empty file named temp1.

• cat > temp2 << “IRZA ”`: Creates a file named temp2 and allows you to

input content until you enter "IRZA".

Practice the following commands and explain each:

• cpio: Copies files to and from archives.

Example: find . -depth -print | cpio -ov > archive.cpio`

• sort:Sorts lines of text files.

Example: sort myfile.txt

• fuser: Displays processes using a specified file or file system.

Example:fuser /home/user/file.txt

• file: Determines the file type.

Example: file myfile.txt

**QUESTION 04:**

What does the z option of the tar command do? Explain with examples

Z OPTION OF THE TAR COMMAND:

The `z` option compresses the tar archive using gzip. Example: `tar -czvf archive.tar.gz /path/to/directory`

**QUESTION 05:**

Differentiate between cp and cpio command?

DIFFERENCE BETWEEN CP AND CPIO COMMAND:

• cp:Copies files or directories from one location to another.

Example: `cp file.txt /destination/path`

• cpio:Copies files to and from archives.

Example: `find . -depth -print | cpio -ov > archive.cpio`

Write two commands to take the backup of your home-folder and all sub-

folders. The destination folder should be /home/bkup.

BACKUP OF HOME-FOLDER AND SUB-FOLDERS:

• tar -czvf /home/bkup/home\_backup.tar.gz /home/IRZA

• rsync -av /home/IRZA /home/bkup

**QUESTION 07:**

What is the difference between the permissions 777 and 775 of the chmod

command?

DIFFERENCE BETWEEN PERMISSIONS 777 AND 775 OF CHMOD:

• 777:Provides read, write, and execute permissions to the owner, group, and others.

• 775:Provides read, write, and execute permissions to the owner and group, but only read and execute permissions to others.