

## QUESTION 01:

lock file: Creates a lock file to indicate that a process is using a particular resource or file. Example: lockfile /tmp/mylockfile

cksum: Calculates a 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 determined by context lines. Example: csplit textfile.txt /pattern/

chattr: Changes file attributes on a Linux file system. Example: chattr +i myfile.txt (sets the immutable attribute) touch: Updates the access and modification time of a file or creates an empty file. Example: touch newfile.txt

## QUESTION 02:

cat ch1: Displays the contents of the file "ch1" in the terminal.

cat ch1 ch2 ch3 > "your-practical-group": Concatenates the contents of ch1, ch2, and ch3 into a new file named "your-practical-group." cat note5 >> notes: Appends the contents of "note5" to the end of the "notes" file. cat > temp1: Creates a new file "temp1" and allows you to input text. Press Ctrl+D to save. cat > temp2 << "yourname": Creates a new file "temp2" and allows multiline input until you enter "yourname." Press Enter, then Ctrl+D to save.

## QUESTION 03:

cpio: Creates or extracts cpio archives. Example: find . -depth | cpio -o -H newc > initramfs.cpio

sort: Sorts lines of text files. Example: sort file.txt

fuser: Displays processes using a file or a socket. Example: fuser /path/to/file file:  
Determines file type. Example: file myfile.txt

## QUESTION 04:

tar Command Option 'z':

The z option in tar is used to compress or decompress the archive using gzip.

Example: tar -czvf archive.tar.gz directory/ (creates a compressed archive)

## QUESTION 05:

cp vs. cpio: cp is used for copying files or directories. cpio is used for creating, extracting, and copying archives.

## QUESTION 06:

## Backup Commands:

To take a backup of the home folder and sub-folders: `tar -czvf /home/bkup/home_backup.tar.gz /home/yourusername`

Another approach using `rsync`: `rsync -av --size-only /home/yourusername /home/bkup`

## QUESTION 07:

Difference in Permissions (`chmod`):

777: Gives read (4), write (2), and execute (1) permission to the owner, group, and others.

775: Gives the owner read, write, and execute permissions, and the group read and execute permissions. Others have read and execute permission.