

COMMANDS	DESCRIPTION
SYSTEM COMMANDS	
uname	used to get OS
uname -r	Displays Linux kernel version
uname -a	Displays all information about Linux system information
uptime	Displays since how system has been running
uptime -p	Shows uptime in pretty format
uptime -s	Shows uptime in pretty format
hostname	Displays the Hostname
hostname -i	Displays IP addresses for the host name
hostname -l	Displays IP addresses for the host name
last reboot	Shows system reboot history
ip addr	Shows addresses assigned to all network interfaces
ip route	Show table routes
ifconfig	Displays the IP address of the system
date	Shows system date and timestamp
date +%d	Prints day of the month (01-31)
date +%m	Prints the month of the year 01-12
date +%y	Prints only the last two digits of Year
date +%H	Prints the hour 00-23
date +%M	Prints the Minute of the hour 00-59
date +%S	Prints the current seconds count in the minute (00-60)
date +%D	Prints Date in MM/DD/YY
date +%F	Prints only the Full date as YYYY-MM-DD
date +%A	Prints the Day of the Week Saturday-Sunday
date +%B	Prints the month between January-December
who	Prints information about default user in our server
whoami	Prints information about all users who are currently logged in
top	List out the running processors in our system
ps	Displays information about a selection of the active processes
HARDWARE COMMANDS	
lscpu	Displays information about the CPU architecture
lsblk -a	Lists the information about all the block devices attached to the system
free	Displays system memory(RAM) details in KB
free -m	Displays system memory(RAM) details in MB
df	Report file system disk space usage
df -h	Report file system disk space usage in human readable languages
du filename	Summarize disk usage of each FILE, recursively for directories
du -sh filename	Summarize disk usage in human readable format
cat /proc/cpuinfo	Displays information about the CPU architecture
cat /proc/meminfo	Displays system memory(RAM) details
fdisk -l	List the partition tables for the specified devices
fdisk -s <partition>	Displays partition size(s) in blocks (to convert block into MB : blocksize*1024/1000000)
FILE COMMANDS	
touch file-name	used to create a single file
touch f1 f2 f3	used to create multiple files
touch file{1..5}	create 5 files at a time
rm file	used to remove single file
rm f1 f2 f3	used to remove multiple files
rm file{1..5}	used to remove 5 files
rm -f filename	used to remove a file without our permission
rm -f *	used to remove all files at a time
mkdir folder1	used to create a single folder
mkdir f1 f2 f3	used to create multiple folders
mkdir folder{1..7}	used to create 7 folders
touch foldername/filename	used to create a file inside the folder
mkdir foldername/foldername	used to create a folder inside a folder
mkdir -p foldername/foldername/foldername	used to create folders inside a folder
cd foldername	used to change the directory
cd ..	used to back to one step back
cd -	used to go back to the previous directory
cd	used to go to root directory at a time
cd /	To change the pwd to root directory which is the topmost/outermost parent directory
pwd	present working directory
rmdir folder	used to remove empty directory
rmdir *	used to remove all empty directories
rm -rf *	used to remove all files and folders at a time
ll	used to see all the files along with the data
ls	used to see only file names

ls folder1	used to see the list of files present in folder1
ll -a	used to see hidden files
ll -r	used to see the files in reverse order
ll -t	used to see the latest files in top
ll -ltr	To list the files in long listing format with sort by modification time, newest first and then in reverse order
cat>filename	used to overwrite the data in a file
cat>>filename	used to append the data into a file
cat filename	used to read the data into a file
cat -n filename	used to read the data along the line numbers
tac filename	Displays the file1 content in reverse ie last line first
rev filename	used to reverse the content in a file
cat f1 f2 f3	used to see all the files data at a time
more f1 f2 f3	used to see all the files data at a time with percentages
head filename	used to print first 10 lines of a file
tail filename	used to print last 10 lines of a file
sed -n '5,9p' filename	used to print the lines between 5 to 9
sed -n '7p' filename	used to print the 7th line
head -n 8 filename	prints 8 lines in a file
tail -n 4 filename	used to print last 4 lines in a file
wc filename	used to get the no of lines, words, letters in a file
wc -l filename	used to get only line numbers of a file
wc -w filename	used to get no of words in a file
wc -c filename	used to get no of characters in a file
cp file1 file2	used to copy the data from file1 file2
cat file1 >> file2	used to append the data from file1 file2
cat file1 tee file2 file3 file4	used to copy the data from file1 to file2 file3 file4
cat file1 tee -a file2 file3 file4	used to append the data from file1 to file2 file3 file4
cp file1 folder1	used to copy file1 to folder1
mv file1 file2	used to move the data from file1 to file2
mv file1 folder1	used to move file1 to folder1
echo folder{2..7} xargs -n 1 cp -v folder1/*	copy files from folder1 to folder2 to folder7 at a time
cmp file1 file2	used to compare the 2 files
diff file1 file2	used to get the differences of a file b/w 2 files
SEARCH COMMANDS	
find . -name file	used to find a file in current directory
find /proc/ -name filename	used to find a file in proc directory
find . -type d -name folder	used to find a folder in current directory
find . -type f -name <file1.txt>	used to find a file in current directory
find . -type f -perm 777	Finds all the files whose permissions are 777 in the current directory
find . -type f ! -perm 777	Finds all the files whose permissions are NOT 777 in the current directory
find . -perm /u=r	Finds all Read-Only files in the current directory
find . -perm /a=x	Finds all executables files in the current directory
find . -perm /a=w	Finds all writable files in the current directory
find . -type f -empty	Find all Empty Files in the current directory
find . -type d -empty	Find all Empty directories in the current directory
find / -user <username>	Finds all the files specific user owned in / directory
find / -group groupname	Finds all the files specific group owned in / directory
find . -mtime 10	Finds all the files which are modified 10 days back in current folder
find / -atime 100	Finds all the files which are accessed 10 days back in current folder
find . -cmin -60	Finds all the files which are changed in the last 1 hour in current directory
find . -mmin -60	Finds all the files which are modified in the last 1 hour in current directory
find . -amin -60	Finds all the files which are accessed in the last 1 hour in current directory
find . -size 1k	Finds all 1KB files in current directory
find / -size +50M -size -100M	Finds all the files which are greater than 50MB and less than 100MB in / directory
locate filename	Used to locate a word in linux (by default it will not locate, we need update db every time)
sudo updatedb	used to update linux db
locate -i filename	used to search for a file in case sensitive
locate -n 5 "*.txt"	used to search top 5 text files
locate -c aws*	used to count no of aws files present in server
grep "word" file	Used to search for a word in a file
grep "word" file1 file2 file3	Used to search for a word in multiple files
grep -l "word" file1 file2 file3	Prints the filename which contains the word
grep -n "word" file	Used to search for a word in a file with line number
grep -i "word" file	Searches the word in file with case-insensitive
grep -c "word" file	Gives the count of words in a file
grep -e <pattern1> -e <pattern2> <file1>	To search multiple patterns in file1
USER COMMANDS	

useradd	To add the user
useradd -e 2024-01-31 username	Set Expiration date of the user. After the date the user will be no longer available
useradd -U username	Create a group with the same name as the user and added the user into the group
useradd -M username	Created username without hoem directory
useradd -D	Prints the default home directory, default shell, default expiration date, and other settings.
userdel	To delete the user
userdel -f username	Forcefully deleted
userdel -r username	Deletes the user along with the directory
chage -l userName	Used to get user expiry details
su - useradd	Login into the user
passwd username	Used to set a password
groupadd	Used to add a group
groups	Displays the group where current user belongs to
groupmod -n newgroup oldgroup	used to change the group name
groupdel	Used to delete the group
groupdel -f	Used to delete the group forcefully
PERMISSION COMMANDS	
chown username file/foldername	To change the user of a file/folder
chown -R username foldername	To change the user of folder along with files
chown username foldername/*	To change the user of all files that are present in folder
chgrp groupname file/foldername	To change the group of a file/folder
chgrp -R groupname foldername	To change the group of folder along wiht files
chgrp username foldername/*	To change the group of all files that are present in folder
chown username:groupname file/foldername	To change the user and group of a file/folder
chown -R username:groupname foldername	To change the user group of folder along wiht files
chown username:groupname foldername/*	To change the user group of all files that are present in folder
chmod 777 file/foldername	To change the permissions of a file/folder
chmod -R 777 foldername	To change the permissions of folder along wiht files
chmod 567 foldername/*	To change the permissions of all files that are present in folder
sudo gpasswd -d username groupname	To delete a user from group

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mkdir foldername/foldername	used to create a folder inside a folder	
mkdir -p foldername/foldername/foldername	used to create folders inside a folder	
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cat file1 >> file2	used to append the data from file1 file2	
cp file1 folder1	used to copy file1 to folder1	
mv file1 file2	used to move the data from file1 to file2	
mv file1 folder1	used to move file1 to folder1	