

**Experiment 1:** - Practice basic bash commands, I/O redirection, and directory operations.

Com mand	Exam ple	Descri ption	Output
pwd	pwd	Print the path of working directory, starting from root.	<pre>vanshak@HP-laptop:~\$ pwd /home/vanshak</pre>
ls	ls  ls..  ls -l	List files in current directory. List files of previous directory. List files with information about them.	<pre>vanshak@HP-laptop:~\$ pwd /home/vanshak vanshak@HP-laptop:~\$ ls file1.txt file2.txt file3.txt file5.txt file6.txt file7.txt file8.txt vanshak@HP-laptop:~\$ cd / vanshak@HP-laptop:/ \$ ls .. bin boot dev etc home init lib lib32 lib64 libx32 media mnt opt proc vanshak@HP-laptop:/ \$ cd ~ vanshak@HP-laptop:~\$ ls -l total 0 -rw-r--r-- 1 vanshak vanshak 78 Sep 30 14:16 file1.txt -rw-r--r-- 1 vanshak vanshak 0 Sep 30 14:07 file2.txt -rw-r--r-- 1 vanshak vanshak 0 Sep 30 14:08 file3.txt -rw-r--r-- 1 vanshak vanshak 78 Sep 30 14:18 file5.txt -rw-r--r-- 1 vanshak vanshak 66 Sep 30 14:23 file6.txt -rw-r--r-- 1 vanshak vanshak 40 Sep 30 14:24 file7.txt -rw-r--r-- 1 vanshak vanshak 37 Sep 30 14:25 file8.txt</pre>
cd	cd ~  cd /	Change directory to home. Change directory to root.	<pre>vanshak@HP-laptop:~\$ cd ~ vanshak@HP-laptop:~\$ pwd /home/vanshak vanshak@HP-laptop:~\$ cd / vanshak@HP-laptop:/ \$ pwd /</pre>

cat	<p>cat &gt; filename.txt</p> <p>cat file1 file2 &gt; file3</p> <p>cat &gt;&gt; filename.txt</p> <p>cat -s filename.txt</p> <p>cat -b filename.txt</p> <p>Cat -E filename.txt</p>	<p>Creating text file and writing in it.</p> <p>Combining two files and store their data in another file.</p> <p>Appending the text to the file.</p> <p>It will suppress multiple empty lines.</p> <p>For numbering the lines except the blank lines.</p> <p>It will add a special character \$ at the end of every line.</p>	<pre> vanshak@HP-laptop:~\$ cat &gt; f1.txt hello vanshak@HP-laptop:~\$ cat &gt; f2.txt welcome vanshak@HP-laptop:~\$ cat f1.txt f2.txt &gt; f3.txt vanshak@HP-laptop:~\$ cat f3.txt hello welcome vanshak@HP-laptop:~\$ cat &gt;&gt; f4.txt c vanshak@HP-laptop:~\$ cat f3.txt &gt;&gt; f4.txt vanshak@HP-laptop:~\$ cat f4.txt c hello welcome </pre> <pre> vanshak@HP-laptop:~\$ cat &gt; f5.txt hi  hwlllo  welcome vanshak@HP-laptop:~\$ cat -s f5.txt hi  hwlllo  welcome vanshak@HP-laptop:~\$ cat -b f5.txt 1 hi  2 hwlllo  3 welcome vanshak@HP-laptop:~\$ cat -E f5.txt hi\$ \$ \$ hwlllo\$ \$ welcome\$ </pre>

mkdir	<div>mkdir [directories]</div> <div>mkdir -v [directory]</div> <div>mkdir -p [directory]</div>	<div>Create a folder in current directory.</div> <div>It displays a message for every directory created.</div> <div>To create parent directory as necessary. If directory exists, no error is displayed.</div>	<pre>vanshak@HP-Laptop: ~\$ mkdir vanshak vanshak@HP-Laptop: ~\$ mkdir -v vanshak mkdir: cannot create directory 'vanshak': file exists vanshak@HP-Laptop: ~\$ mkdir -v folder mkdir: created directory 'folder' vanshak@HP-Laptop: ~\$ mkdir -p parent vanshak@HP-Laptop: ~\$ mkdir -pv parent vanshak@HP-Laptop: ~\$ ls f1.txt f2.txt f3.txt f4.txt f5.txt file1.txt file2.txt file3.txt file5.txt file6.txt file7.txt file8.txt folder parent vanshak</pre>
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rmdir	rmdir [direct ory]	Remove the director ies only if they are empty.	<pre>vanshak@HP-Laptop:~\$ ls f1.txt f2.txt f3.txt f4.txt f5.txt file1.txt file2.txt file3.txt file5.txt file6.txt file7.txt file8.txt folder parent vanshak vanshak@HP-Laptop:~\$ rmdir parent vanshak@HP-Laptop:~\$ ls f1.txt f2.txt f3.txt f4.txt f5.txt file1.txt file2.txt file3.txt file5.txt file6.txt file7.txt file8.txt folder vanshak vanshak@HP-Laptop:~\$</pre>
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rm	<div>rm [files]</div> <div>rm -i [files]</div> <div>rm -F [file]</div> <div>rm -r [direct ory]</div>	<div>Remove files or director ies (by default it does not remove director ies. Confirm from user before deletion</div> <div>.</div> <div>Remove file by force.</div> <div>Remove s all the director ies which are non-empty too.</div>	<pre>vanshak@HP-Laptop:~\$ ls f1.txt f2.txt f3.txt f4.txt f5.txt file1.txt file2.txt file3.txt file5.txt file6.txt file7.txt file8.txt folder vanshak vanshak@HP-Laptop:~\$ rm file1.txt vanshak@HP-Laptop:~\$ rm -i file2.txt rm: remove regular empty file 'file2.txt'? y vanshak@HP-Laptop:~\$ rm -f file3.txt rm: command not found vanshak@HP-Laptop:~\$ rm -f file3.txt rm: invalid option -- 'f' Try 'rm --help' for more information. vanshak@HP-Laptop:~\$ rm -f file3.txt vanshak@HP-Laptop:~\$ rm -r folder f1.txt f2.txt f3.txt f4.txt f5.txt file5.txt file6.txt file7.txt file8.txt vanshak</pre>
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