

File Compression

ZIP

1 . Creating a ZIP Archive for multiple files :

zip files file1.txt file2.txt file3.txt

```
[root@localhost ~]# zip files kholi2 kholi4 kholi5
  adding: kholi2 (stored 0%)
  adding: kholi4 (stored 0%)
  adding: kholi5 (stored 0%)
[root@localhost ~]# ls
abikar  bye      Documents  files.zip  hardlink  kholi2
```

2 . Show file contents in Zip :

zip -sf files.zip

```
[root@localhost ~]# zip -sf files.zip
Archive contains:
  kholi2
  kholi4
  kholi5
```

3. Adding a Directory to existing ZIP Archive :

zip -r files <directory>

```
[root@localhost ~]# zip -r files p
  adding: p/ (stored 0%)
```

4 . Delete Files From ZIP Archive :

zip -d files.zip file5.txt

```
[root@localhost ~]# zip -d files.zip kholi2
deleting: kholi2
```

5. To create random 1Gb file :

fallocate -l 1G filename

```
[root@localhost /]# fallocate -l 1G example
[root@localhost /]# ls -lh example
-rw-r--r--. 1 root root 1.0G Jun 10 04:19 example
```

6 . To Extract or Unzip the zip Archive :

unzip filename.zip

```
[root@localhost ~]# unzip files.zip
Archive:  files.zip
replace kholi4? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
extracting: kholi4
replace kholi5? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
extracting: kholi5
```

Note : while compressing the file into zip it has the backup file also.

ls -lh - to list the file in human understandable file size

GZIP

1. To Gzip the file :

gzip filename

```
[root@localhost ~]# touch naveen  
[root@localhost ~]# gzip naveen
```

```
-rw-r--r--. 1 root  root  27 Jun 10 06:24 naveen.gz
```

Note : Here it gets compressed by removing the original file.

2 . To keep the original file in gzip :

gzip -k filename

```
[root@localhost ~]# touch nabi  
[root@localhost ~]# gzip -k nabi
```

Note : Here it gets compressed without removing the original file.

3 . To extract the gzip :

gunzip filename.gz

```
[root@localhost ~]# gunzip dhoni1.gz
```

Note : Here while extracting the compress file get removed.

4. To keep the compress file while extracting :

gunzip -dk filename.gz

```
[root@localhost ~]# gunzip -dk naveen.gz
```

Note : Here while extracting the compress file get removed.

TAR

1. Creating a tar Archive File for multiple files :

tar cvf demo.tar file1 file2 file3 file4

c – Creates a new .tar archive file.

v – Verbosely show the .tar file progress.

f – Filename type of the archive file.

```
[root@localhost /]# tar cvf demo.tar siraj1 siraj2 siraj3 siraj4
siraj1
siraj2
siraj3
siraj4
```

2 . To list Content of tar Archive File created :

tar tvf demo.tar

```
[root@localhost /]# tar -tvf demo.tar
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj1
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj2
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj3
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj4
```

3 . To Extract or Untar the tar archive :

tar xvf demo.tar

```
[root@localhost /]# tar xvf demo.tar
siraj1
siraj2
siraj3
siraj4
```

4 . Add Files or Directories to tar Archive File in Linux :

tar -rvf demo.tar file1 file2 file3

```
[root@localhost /]# tar -rvf demo.tar bumrah1 bumrah2 bumrah3
bumrah1
bumrah2
bumrah3
```

5 . Remove File and Directory from Tar Archive :

tar --delete -f demo.tar file1 file2

```
[root@localhost /]# tar --delete -f demo.tar bumrah1 bumrah2
[root@localhost /]# tar -tvf demo.tar
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj1
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj2
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj3
-rw-r--r-- root/root      0 2024-06-10 04:05 siraj4
-rw-r--r-- root/root      0 2024-06-10 04:13 bumrah3
```

6. To Create tar.gz Archive File in Linux :

tar cvzf example.tar.gz file1 file2

```
[root@localhost ~]# touch pandya{1..5}
[root@localhost ~]# tar cvzf example.tar.gz pandya{1..5}
pandya1
pandya2
pandya3
pandya4
pandya5
```

7. Create tar.bz2 Archive File in Linux :

tar cvjf example.tar.bz2 file1 file2

```
[root@localhost ~]# tar cvjf example.tar.bz2 pandya{1..5}
pandya1
pandya2
pandya3
pandya4
pandya5
```