**Compression and decompression**

\*Utilities we have in linux for compression and decompression

1. gzip
2. bzip2

\*To compress the file using gzip the resultant file will be of extension .gz

gzip <file name>

\*To decompress the same file

gunzip <file name>

\*To compress the file using bzip2 the resultant file will be of extension .bz2

bzip2 <file name>

\*To decompress the same file

bunzip2 f2.bz2

\*to create the backup of the directory

* tar [tape archieve]
* cvf [create verbose file]

tar cvf <filename>.tar <file name>

\*to decompress the backup

tar xvf <file name>.tar

# there are some file which are of extension <filename>.tar.gz (also called nested compression)

gzip <file name>.tar

#to decompress the same file

gunzip <file name>

# similar type of file is <file name>.tar.bz2

bzip2 <filename>.tar

|  |  |
| --- | --- |
| tar cvf <file name>.tar <file name> | Tar cvfz <file name>.tar.gz <file name>  [compress and backup] |
| gzip <file name>.tar |
| gunzip <file name>.tar | Tar xvfz <file name>.tar.gz (.xvzj for bz2)  [decompression and restore] |
| tar xvf <file name>.tar |

# inbuilt variable of the linux are of following types (generally used with echo command)

1. $HOME
2. $PWD (present working directory)
3. $SHELL
4. $PATH

#permission and control

1. If user is on its own created file then he could tweak all the permissions associated with the file

chmod u+x <file name>

u stands for user

+ stands for grant – for revoke

x stands for execution