# Linux Compression: tar, gzip, and zip Commands Explained

* What is file compression – file compression reduces the size of files by encoding their data more effectively
* This is essentially useful for backup, storage, and file transfer
* To compress a single file or multiple files use command – gzip filename(gzip command can be only used for files not directories) or gzip file1 file2 ..
* To decompress a file – gunzip filename
* To compress a directory with a tar archive(folder.tar) – tar -cvf foldername.tar foldername
* To compress a directory with gzip archive(folder.tar.gz) – tar -czvf foldername.tar.gz foldername
* Here c means compress, v means verbose, f means filenames, and z means zip
* To decompress the gunzip file you can run – tar -xzvf foldername.tar.gz foldername
* Here x means extract
* To compress multiple files at the same time – zip archieve\_name.zip file1 file2 ..
* To decompress a zip archieve – unzip archieve\_name.zip
* The difference between tar and zip command are – zip is easier, but tar preserved the meta data like file permissions and timestamps, the meta data is saved when we use tar, in zip the meta data is not preserved
* To check the contents of a tar file, without extracting it, use command – tar -tzvf folder.tar.gz
* To read contents of a zip file – zcat filename
* To get info about a zipped file – zipinfo filename.zip