Homework 3 (file compression, disk/partition handling, some text utils)

1. How to set the output directory for all compression methods (unzip,tar,gunzip,bunzip2,unrar,7z,xz) different that the local directory? See the man pages or just google it;)
2. How to use df command to list only ext4 (or any other specific) filesystem type mounts?
3. How to find out the mount options for a specific mount (google it, but we had the command on the last lecture just did not use it that way)?
4. How to use hdparm to check the read speed on a disk/partition (man pages)?
5. Display inode usage for that filesystem (hint: df). Explain how a filesystem could run out of inodes while still having free disk space.
6. How to cut out all the columns from a file expect the 8th? Also make sure the lines which do not contain delimiter are not prined at all (see man cut).
7. Create a text file (stations.csv) containing 3 columns delimited by ";": cityname;elevation;temperature (use arbitrary values, at least 5 rows). Now a) print only the city names, b) Sort the complete records alphabetically by station name. c) Sort the complete records by elevation, from lowest to highest. d) Sort the complete records by temperature, from highest to lowest.