File utilities - Quick exercises

1. Create a directory “first_dir” in you home folder
2. Create an empty file “text_file.txt” inside “first_dir” directory.
3. Add execute permissions to group users, and write permissions to other users to “text_file.txt”
4. Create 3 subdirectories inside “first_dir”: “sub1”, “sub2”, “text_file”
5. Copy the “text_file.txt” file into “sub1” directory.
6. Move the “text_file.txt” into sub2 under name “text_file.txt.2” .
7. Copy the whole directory “sub1” to “sub3” directory.
8. Change file name of “first_dir /sub2/text_file.txt.2” to “first_dir /sub2/text_file.txt.backup”
9. Move “first_dir /sub2/text_file.txt.backup” to “first_dir” directory as hidden file
10. Delete the “sub2” subdirectory

File utilities - Quick exercises

1. mkdir first_dir
2. touch first_dir /text_file.txt

(cd first_dir)

3. chmod g+x,o+w text_file.txt
4. mkdir sub1 sub2 first_dir
5. cp text_file.txt sub1/ (or cp -p text_file.txt sub1/)
6. mv text_file.txt sub2/text_file.txt.2
7. cp -r sub1/ sub3/
8. mv sub3/text_file.txt.2 sub3/text_file.txt.backup
9. mv sub3/text_file.txt.backup ./.text_file.txt.backup
10. rm -r sub2/

Content utilities - Quick exercises

1. Go to data/shell/ directory and use less to open Finn.txt
   a) locate the lines starting with “The”
   b) Locate the lines ending with “works”
2. Open ~/Data/opentraveldata/optd_aircraft.csv with less command. Search for “Canada” and then search for “Puma”
3. Use help to find out how to get the list of subdirectories limited to 2 sublevels by using “tree” command

Content utilities - Quick exercises

1. less Finn.txt

   a) ^The

   b) works$

2. Use forward/backward search… and use G/g: go to end/beginning of file

3. *(if you don't have tree installed: sudo apt-get install tree)*

   man tree (search for depth or level)

   tree -L 2

Content utilities - Quick exercises

1. Save the information (permissions, size, modification date etc.) of the largest file located inside opentraveldata directory into a file largest_file.txt. (hint: use ls with sort option and pipe the result)
2. How many words do first 5 lines of the Finn.txt have?
3. Print first 3 lines of Text_example.txt together with line numbers (hint: use cat and head)

Content utilities - Quick exercises

1. ls -ls | tail -n 1 > largest_file.txt
2. head -n 5 Finn.txt|wc -w
3. cat -n Text_example.txt | head -n 3

File utilities - Quick exercises

1. Use Text_example.txt to generate a new file with the same content but with line number at the beginning of each line.
2. Generate a new file with twice the content of “Text_example.txt” one after another inside the file. (one full text content after another)
3. Open new shell inside a new terminal tab and using block search execute again the command where we printed the linux details at the beginning of the class (hint: it had "release" in the name)
4. Generate a file with creation timestamp and name of the user who created it on the first line. Something like this:

   "# This file is created by KSCHOOL on:Sun Nov 26 10:31:06 CET 2017 »

   (hint use command date to generate the time stamp, use man to read the date manual if needed)
5. Save last 20 commands used at command line to a file. (hint use history and redirect the output)
6. Print content of Text_example.txt except first 2 and last 3 lines.
7. How many lines does optd_aircraft.csv file have?

File utilities - Quick exercises

1. cat -n Text_example.txt > Text_example_line_numbers.txt
2. cat Text_example.txt Text_example.txt > Text_example_x2.txt
3. CTRL+shift+T

   CTRL+R

   type: relase

   use CTRL+R to locate the command
4. echo "# This file is created by KSCHOOL on: $(date)” > timestamp_header.txt
5. history -20 >last_20.txt (or….. cat .history | tail -n 20 > last_20.txt)
6. cat -n Text_example.txt | head -n -3 | tail -n +3
7. wc -l ~/Data/opentraveldata/optd_aircraft.csv

File utilities - Quick exercises

1. Find all files located inside subdirectories of your home directory which have been modified in last 60min
2. Find all empty files inside subdirectories of your home directory which do NOT have read-write-execute permissions given to all users
3. Expand previous command to grant these permissions using “ok” option.
4. Get top 3 largest files per subdirectory inside ~/Data/

File utilities - Quick exercises

1. find ~ -mindepth 2 -type f -mmin -60
2. find ~ -mindepth 2 -type f -empty ! -perm 777
3. find -type f -empty ! -perm 777 -ok chmod 777 {} \; (use CTRL+C to kill this command)
4. find ~/Data/ -type d –maxdepth 1 -exec echo {} \; -exec sh -c "ls -S {} | head -3 " \;