More linux commands

Search and sort

- find
  search for files in a directory hierarchy

  First define a directory from where on we are searching. The search is performed recursively.

  If searching by a **name**, use switch –*name*.
  If searching by a **type**, use switch –*type*.
  If searching by a **time change**, use switch –*mtime, -ctime, -atime, -mmin, -cmin, -amin* (and add time you are interested in)
  (m – modified, c – changed, a – accessed;   time is set in days and min in minutes)

Search and sort

- locate

  Locate command performs search in a database which is generated once a day using updatedb command.

  When indexing the data it does not look after permissions but it actually index all the files on the disk.
  When printing out the results it takes into account the permissions a user has on the data.

  Downside: it does not work in real-time

Search and sort

- ls
  Results when *ls* command is performed can be sorted by:
  - Ending: -X (sorts by alphabetical order of endings)
  - Without sorting: -U (list entries in directory order – directories first)
  - Size: -S (ls –lS)
  - Version: -v
  - Time: -t (sort by time; in combination with -c and -u)
  - Changes of status: -c
    - ls -ltc (sort by time a change has been made and print it out),
    - ls -lc (sort by name and show the time a change has been made)
    - ls -c (sort by time)
  - Access time: -u
    - ls -ltu (sort by access time and prit it out)
    - ls -lu (show access time and sort by name)
    - ls –u (sort by access time)

Search and sort

- sort
Sort lines of text files

  By default it sorts lines by alphabetical order.
  To sort by „numbers", use *–n*

  usage: sort names.txt

Time commands

- date
  show and set time and date

- cal
  printout of a calendar by different criteria (years, months,...)

- time
  put it before any other command to record the time to execute the given command

- crontab
  automatic scheduler (a list of commands that you want to run on a regular schedul)

Archiving

- tar (tape archiver)
  programme for archiving (combining several files and directories in one archive file)

- gzip, gunzip
  compression and un-compression of documents

- There are several more programmes which can compress the data (zip, unzip, rar, unrar,...)

User controls

- passwd: change the password
  (this does not work @FAMNIT computers due to different kind of authentication)

- id, groups: id number of a user and which groups does a user belong to

- finger: infomation about the user

- whoami, who: information on signed-in users

- su, sudo: log-in and execution of commands under a different username

- adduser, addgroup: adding users and groups

- usermod, userdel: editing of user's information and deleting of users

Processes

- top: display linux processes and resource usage in real time
- uptime: display how long the system has been running
- ps, pstree: display a tree of processes
- kill: stop the execution of a process
- uname: print system information (OS information)
- cat /proc/cpuinfo: information on processor

Network

- ifconfig, iwconfig: data and setting of the data on network cards
- route: printing, adding and deleting of data from routing table
- hostname:printing and setting the name of the computer
- /etc/resolv.conf: listed domain servers (each in it's own line)

- mount, unmount: connecting and disconnecting a device
- shutdown, (halt, reboot): shutting down the computer