

Bases of Unix II.

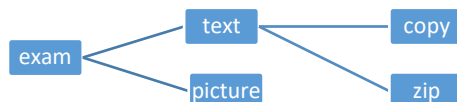
Summary: We learn about special commands which can be used as filters too in pipelines. Before the first part-examination, we practice the usage of base LINUX commands.

Commands we learn about: sort-orders the content of the file, more, less - paging, wc - counter, head – first lines, tail – last lines, cut – cut out part of the input, grep – lets only lines which fits to pattern, tee – branch.

Filter commands in pipes

1. Count the number of files and subdirectories (together) in your working directory. (ls, wc)
2. Count the number of the actual users, whose login name starts with „m”! (grep, who, wc)
3. Give back the first login name (the first one in alphabetical order) of actual users! (who, sort, head)
4. Count the numbers of lines, which contain the world ELTE! (cat, grep, wc)
5. Count how many different logged in users are in the system? (who, sort, uniq, wc)
6. Count the number of files and subdirectories (1st line) and the number of subdirectories (2nd line) in your working directory and write the data into a file. (ls, wc, tee, grep)
7. Write only the lognames of logged in users into a file and write the numbers of them at the end of the file! (who, cut, tee, wc)
8. Write only the lognames of logged in users into a file and write to the end of the file how many different users are logged in! (who, cut, tee, wc, sort, uniq)
9. Write out the filenames and the size of the files of your directory. In this order!! (ls, cut, paste)

Practice for the examination!



- 1) Please find a photo about a car and with file transfer upload it onto the **picture** directory! Download from the server the **language.txt** file and copy it to directory **text**! Write the commands you used for the solution into the second line of **command.txt**!
- 2) Create an **index.html** file with a link to **language.txt** and with the picture about the car! You can use any editor you want! Write down into **command.txt** which editors you know in LINUX!
- 3) Write down how can you delete a line in vi! How can you search something in vi?
- 4) Redirect into **lines.txt** file (in **text** directory) the first 10 lines of **language.txt**. Redirect and append to file **lines.txt** the lines of **language.txt** between 20-25!
- 5) Make a copy of **language.txt** to **copy.txt**, a hardlink (**hard.txt**) and a softlink (**soft.txt**) to **language.txt**!

- 6) Count the number of lines of *language.txt* files! Count the number of languages which starts with letter „m”! Count how many different starting letters are in languages names! Redirect the 3 results into *count.txt* file and place it into *text* directory!
- 7) Create a *firstcolumn.txt* file from only the language names of *language.txt* file! Create a *firstthree.txt* file from only the first three characters of the language names! Place the files into the *text* directory!
- 8) Create an *ls.txt* file which contains the detailed list of your actual directory! Please, modify the permission of it: rw- ---rw! Write down in *command.txt* file both methods!
- 9) Start sleep 1000 and a sleep 500 in the background! Redirect the result of the detailed list about processes into *processes.txt* in directory *text*! Send a SIGINT signal to sleep 500 and a SIGTERM to sleep 1000. Redirect the result of the detailed list about processes and append it to the end of file *processes.txt*!
- 10) Change each of „a” character into „x” in *language.txt* file and the result should be *ax.txt* file in *text* directory!
- 11) Find and cat the contents of all of your txt files into *long.dat*! Make a copy of everything (txt, html) into *copy* directory!
- 12) Make a zip file from the content of the *copy* directory! Download from the server the *files.tar* and unpack it into *copy* directory!
- 13) Send an e-mail to the laboratory teacher including the *command.txt* file!