

# Bases of Unix I.

**Summary:** We learn about text editors like *joe*, *pico*, *mcedit* and *vi(m)*. We get to know the main character commands of editing with *vi*.

We learn about permissions in *LINUX* system, like: reading, writing and execution permissions and about users, groups, others and superuser! We modify the permissions with two different ways: with numbers and with characters.

We learn about foreground and background processes and how to stop them.

**Commands we learn about:** *ls al* – list of files, *chmod* – change permissions, *&* - start at the background, *fg* – move to the foreground, *bg* – move to the background, *ps* – list of processes, *jobs* – list of jobs, *kill* – send a signal, *trap* – trap a signal

## Editors

1. Create a simple file (*elte.txt*) with *vi* – should contain the subject names you learn here in ELTE!
2. Create a simple file (*favourite.txt*) with the names of your favourite sportsmen /actors! Use *mcedit*!
3. Create a simple file (*country.txt*) with the country names of Europe! Use *pico*!
4. Create a simple file (*towns.txt*) the nicest towns you have seen. Use *joe*!
5. Create a simple HTML file (*index.html*) about yourself and publish it in your webpage! The html file should contain your name, your native country, a photo about your country, a link to a page about your native town or country! You can use any of the above mentioned simple editors or anything you wish (e.g. Word, VS, etc) and filetransfer it!

## Permissions

6. Modify the permissions of the text file with both methods! Give for the group a permission for writing and remove reading permission from others! (*chmod*)
7. Make a copy from the above mentioned file. Check it's permissions!
8. Remove the reading permission of others for the file in the *public\_html* directory. Check whether you can see it in the browser or not!

## Processes

9. Start the sleep 1000 command! Send a SIGINT signal to the process! (CTRL+C). Check with *ps* command, that the sleep process is terminated. (*ps*)
10. Start a new sleep 1000 command! Send a SIGTSTP signal to the process! (CTRL+Z). Check with *ps* command, that the sleep process is still existing. (*ps*)
11. Restart it in the foreground! (*fg*) Send a SIGTSTP signal to the process! (CTRL+Z). Check with *ps* command, that the sleep process is still existing. (*ps*)
12. Restart it in the background! (*bg*) Send a SIGTSTP signal to the process! (CTRL+Z). Check with *ps* command, that the sleep process is still existing. (*ps*)
13. Send a SIGKILL to the sleep process! (*kill*) Check with *ps* command, that the sleep process is terminated. (*ps*)
14. Start a yes process! Login with an other terminal connection and kill the process from the new window! (*ps*, *kill*)
15. Trap the SIGINT signal – write out your name while getting the signal! Try it! (*trap 2*). State back the default working. Try it again! (A running process + CTRL+C)