

Unix

Part 1

Goal: Get familiar with the system

Step 1

- Discover the system
- Start a terminal
- Use `man man` command, and read the manual

hint: hit ``q`` to quit, read ``man less`` to learn more about the reader

- Get familiar with `echo`, `cd`, `ls`, `mkdir`, `cp`, `mv`, `rm`, `touch`, `env`, `export`, `unset`

hint: RTFM! (Read The Fucking Manual =))

Step 2

- Create a directory `~/share/ex/unix/part1`

hint: What is `~``?
RTFM!

- Create an empty file `~/share/ex/unix/part1/file1`

hint: ``man touch``

- Create a file `~/share/ex/unix/part1/file2` containing `Unix Step 2`

hint: Inputs, Outputs and redirections (``>``, ``>>``, ``<``, ``<<``)

- Create a link `~/share/ex/unix/part1/file3` to `~/share/ex/unix/part1/file2`

```
hint:  `man ln`
```

Step 3

- Write a command in the file `~/share/ex/unix/part1/list` which should be able to write a detailed list of all files and directories in `~/share/ex/unix/part1`, with colors, human readable file sizes, and a "/" at the end of directories

```
hint:  man ls
      man touch
```

- Change the rights to `~/share/ex/unix/part1/list`, giving "read", "write", and "execution" rights to the owner, "read" and "write" rights to the group, and "read" only rights to all other user.

```
hint:  man chmod
      (man chown)
```

Step 4

- Push the content of `~/share` repository

```
hint:  man git
      man git add
      man git commit
      man git push
```

Part 2

Goal: Learn text editor, go deeper in console usage

Step 1

- Write a command in the file `~/share/ex/unix/part2/list` which should be able to write a detailed list of all files and directories in `~/share/ex/unix/part1`, with colors, human readable file sizes, and a "/" at the end of directories. In addition, in the content displayed, all "i" should be replaced by a "z".

```
hint:  man sed
       What is a `pipe` (`|`)?
```

- Write a command in the file `~/share/ex/unix/part2/root` which should be able to write a detailed list of all files and directories in `/`, with colors, human readable file sizes, and a `/` at the end of directories.
Don't display any directory containing the letter "e" and "m".

```
hint:  man grep
```

Step 2

- Get familiar with the editor `vi`

```
hint:  "vi" is hard to use at the beginning! Spend some time reading
       the manual, and search some tricks online! Spend enough time to
       understand the "insert" modes.
```

Step 3

- Write a bash script in `~/share/ex/unix/part2/script.sh` which runs the scripts done in Step 1 and 2. I should be able to run it using `cd ~/share/ex/unix/part2/ && ./script.sh`

```
hint:  man bash
       search online how to write and execute bash scripts
       man chmod
```

- Learn about local and environment variables

```
hint:  man bash
       man env
```

Step 4

- Push the content of `~/share` repository

```
hint:  man git
       man git add
       man git commit
       man git pull
       man git push
```