# Homework M3: Editors. Files. Streams

You can work on the machine used so far or on a new one. The following tasks must be performed:

1. Make a local copy of the **/etc/services** file
2. Using command line tools, create a variant of the local **services** file containing only the **comment lines** (lines starting with **#** symbol) and save it under the name **services\_comments.txt**. For example:

# Comment line

# Comment line

ssh 22/tcp # ssh tcp port

ssh 22/udp # ssh udp port

1. Using command line tools, create another variant of the local **services** file containing everything but the comment lines and save it under the name **services\_wo\_comments.txt**

ssh 22/tcp # ssh tcp port

ssh 22/udp # ssh udp port

# Comment line

ssh 22/tcp # ssh tcp port

ssh 22/udp # ssh udp port

1. Using command line tools, create third variant of the local **services** file without comment lines and containing only information about **udp** services and save it under the name **services\_udp.txt**

# Comment line

ssh 22/tcp # ssh tcp port

ssh 22/udp # ssh udp port

ssh 22/udp # ssh udp port

1. Open the file **services\_wo\_comments.txt** in **vi** editor
2. Find the line about **blackjack** service for CentOS and openSUSE, or **socks** for Ubuntu
3. Delete **everything** from **this line to the end of the file**
4. Save the result as **new file** under the name **well-known-ports.txt**
5. Quit **vi** without saving the changes to the original file
6. Using command line tools, substitute the symbol **/** with **-** symbol for the **first 100 lines** in the **well-known-ports.txt** file and store the result as **100-well-known-ports.txt**
7. Create **here document** named **doc1.txt** with the following content:

**10-IT-HQ**

**20-Accounting-HQ**

**30-Help Desk-Remote**

**40-Sales-HQ**

1. Create second **here document** named **doc2.txt** with the following content:

**10-B.Thomas**

**20-J.Foster**

**30-G.Smith**

**40-F.Hudson**

1. Join the **doc1.txt** and **doc2.txt** files in a resulting file named **doc3.txt**
2. Enter set of commands to extract the **unique values** from the **third** field of **doc3.txt** file and store them in **locations.txt** file
3. **Extend** the **previous** command in order to **count the unique values** and **add** the result to the **locations.txt** file
4. Find **all** files in **/etc** and its **sub-directories** with **size less than 200 bytes** and store their **detailed** **list** in **small\_etc\_files.txt** file

## Proof

Upload a document (txt, doc, docx, pdf) containing the commands that you executed in order to accomplish the above tasks. For the steps that are done in the **vi** editor write down the **commands** or **key** **combinations** used.