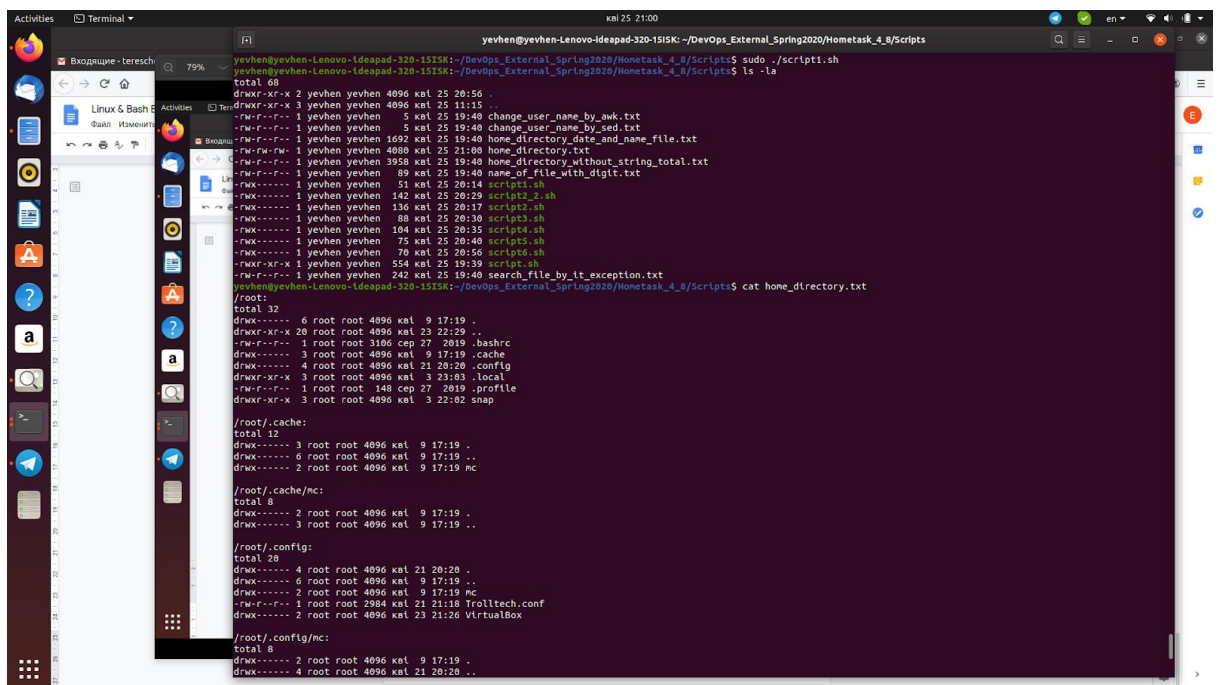
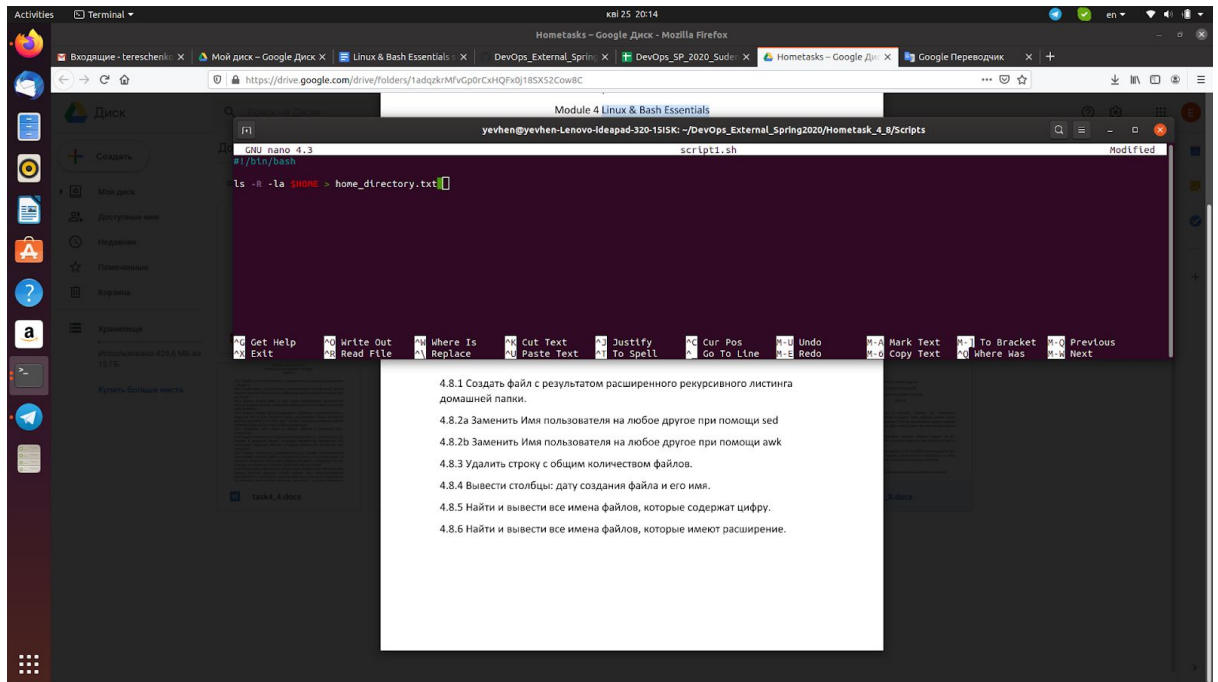


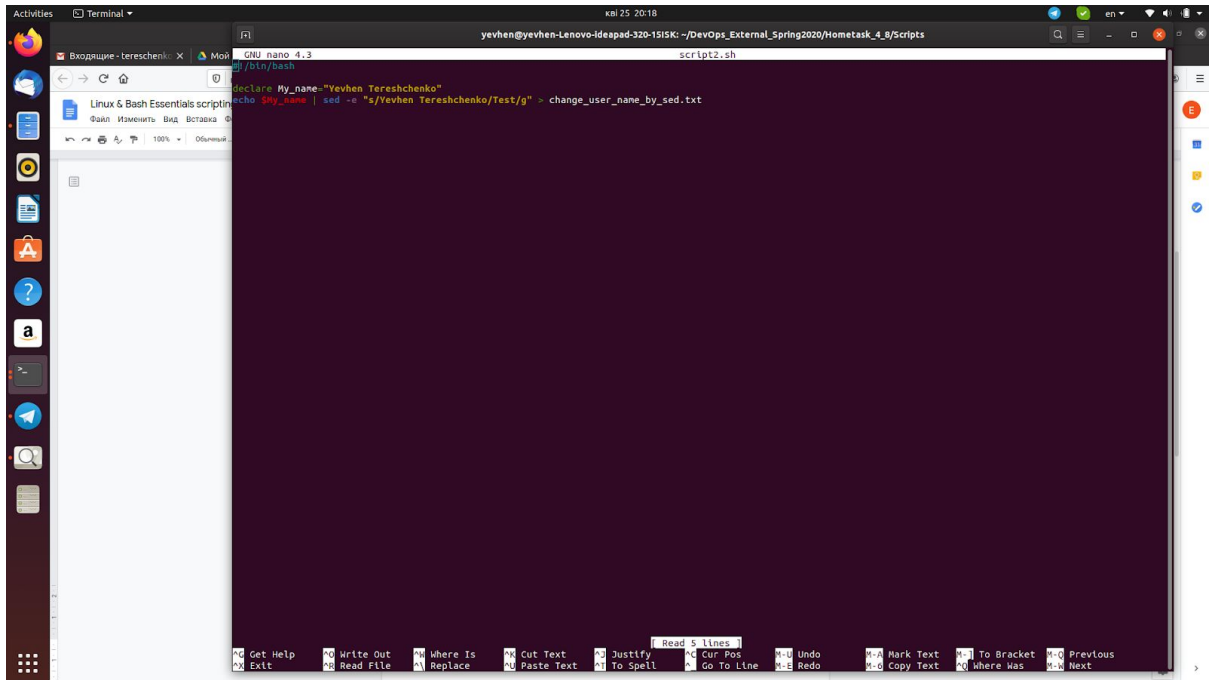
Linux & Bash Essentials

Scripting

1. Create file with result extended recursive listing homedirectory



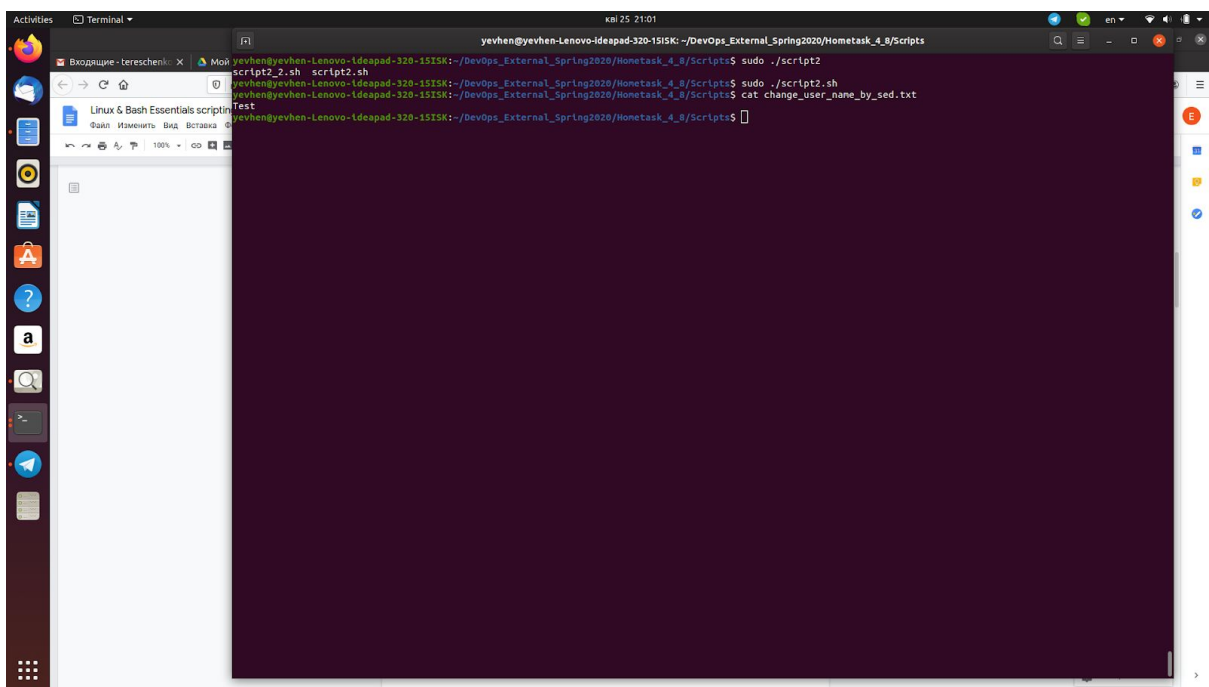
2. a. Change name of user to another with sed.



The screenshot shows a terminal window with the following content:

```
GNU nano 4.3 script2.sh
#!/bin/bash
declare My_name="Yevhen Tereshchenko"
echo $My_name | sed -e "s/Yevhen Tereshchenko/Test/g" > change_user_name_by_sed.txt
```

The terminal window is titled "yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts". The bottom status bar shows various keyboard shortcuts like "Get Help", "Exit", "Write Out", "Read File", "Where Is", "Replace", "Cut Text", "Paste Text", "Justify", "To Spell", "Cur Pos", "Go To Line", "Undo", "Redo", "Mark Text", "Copy Text", "Where Was", "Previous", and "Next".

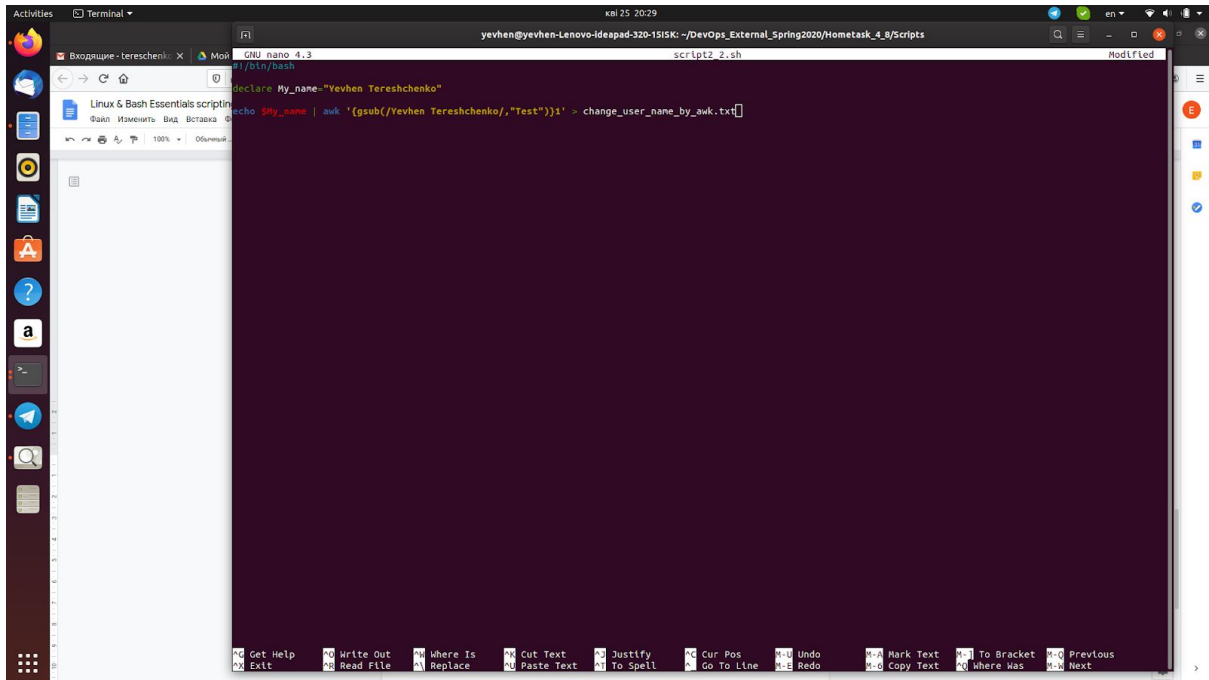


The screenshot shows the same terminal window after running the script. The output is as follows:

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script2
script2.2.sh script2.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script2.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat change_user_name_by_sed.txt
Test
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$
```

The terminal window title remains the same. The bottom status bar is identical to the previous screenshot.

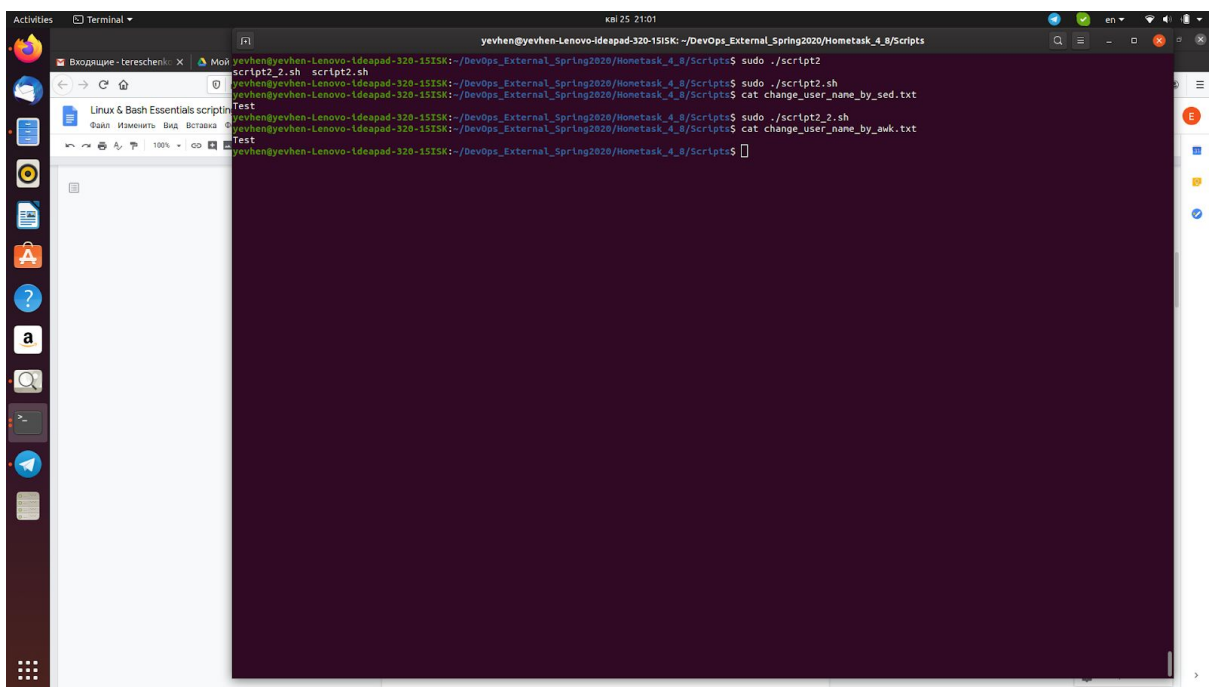
2. b.Change name of user to another with awk.



The screenshot shows a terminal window with a nano editor open. The user is editing a file named `script2_2.sh`. The script contains the following code:

```
#!/bin/bash
declare My_name="Yevhen Tereshchenko"
echo $My_name | awk '{gsub(/Yevhen Tereshchenko/, "Test")}' > change_user_name_by_awk.txt
```

The terminal window title is `yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts`. The nano editor's status bar at the bottom shows various editing commands like Get Help, Exit, Write Out, Read File, etc.

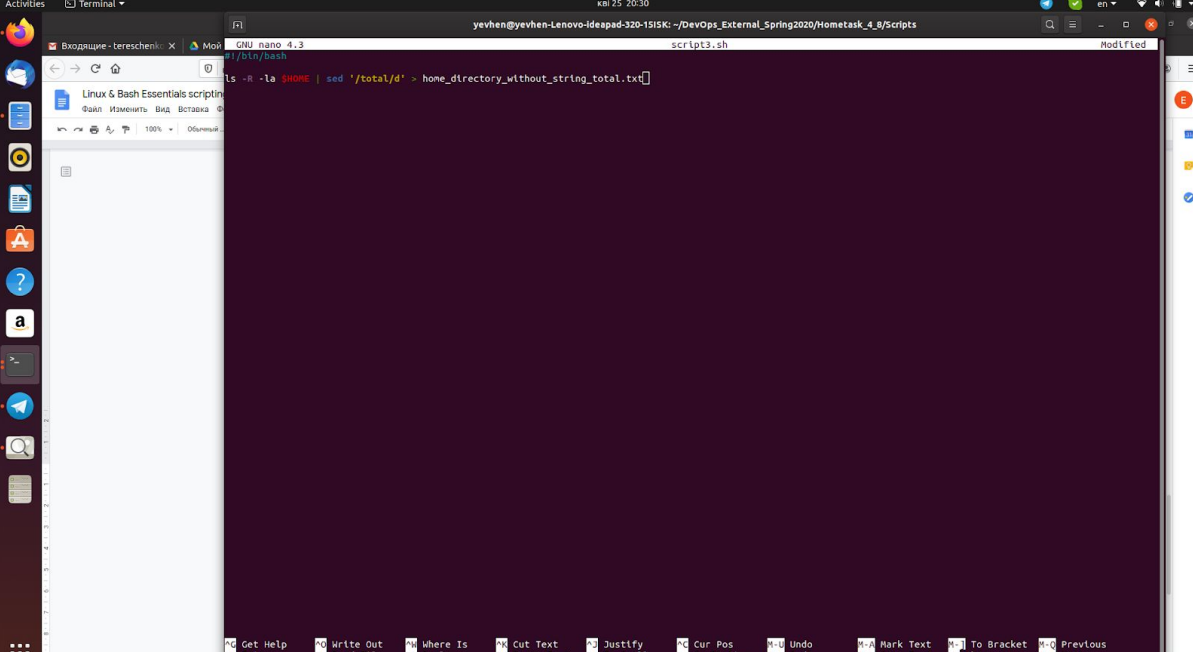


The screenshot shows the same terminal window after running the script. The user has executed `sudo ./script2`, which ran `script2_2.sh`. The output of the script is shown in the terminal:

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script2
script2_2.sh script2_2.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script2_2.sh
Test
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat change_user_name_by_sed.txt
Test
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script2_2.sh
Test
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat change_user_name_by_awk.txt
Test
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$
```

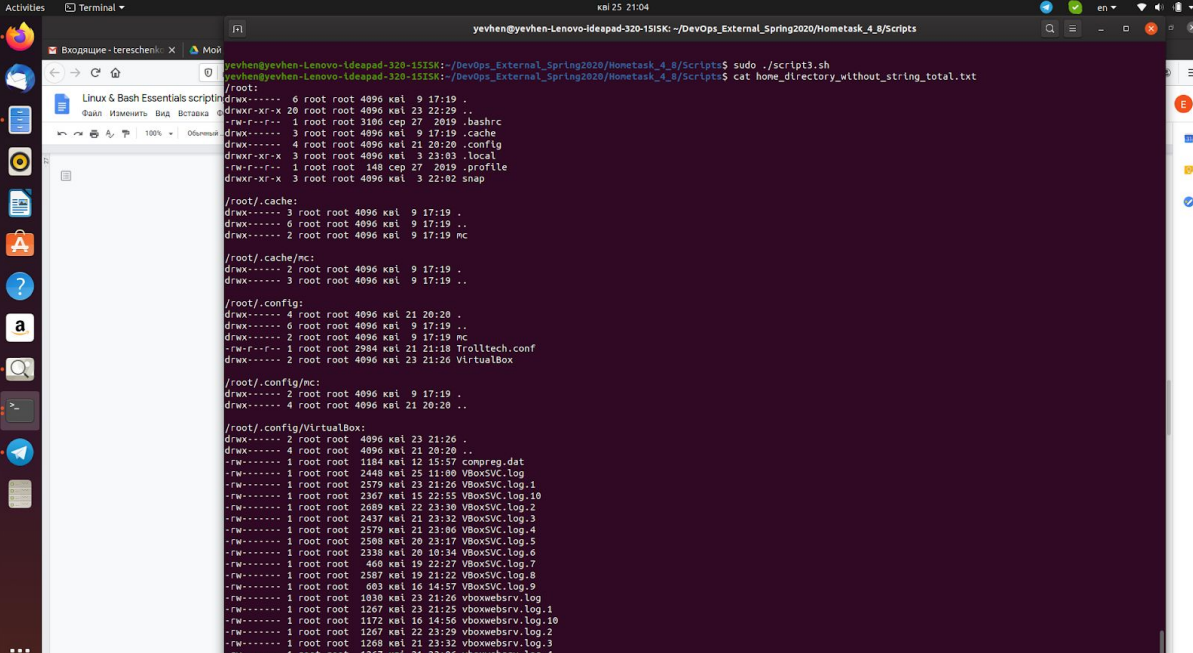
The terminal window title is `yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts`.

3. Delete string with total quantity of file



The screenshot shows a terminal window with the command `sed -i -la $HOME | sed '/total/d' > home_directory_without_string_total.txt` being executed. The terminal output shows the command being run and the file being created. The terminal window is titled "yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts".

```
GNU nano 4.3 scripts.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts
ls -la $HOME | sed '/total/d' > home_directory_without_string_total.txt
```



The screenshot shows the terminal output of the command `cat home_directory_without_string_total.txt`. The output displays the contents of the file, which is a list of files and directories in the home directory, excluding the string "total". The terminal window is titled "yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts".

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./script3.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat home_directory_without_string_total.txt
/root:
drwxr-xr-x 6 root root 4096 ksl 9 17:19 .
drwxr-xr-x 20 root root 4096 ksl 23 22:29 ..
-rw-r--r-- 1 root root 3106 cep 27 2019 .bashrc
drwxr-xr-x 3 root root 4096 ksl 9 17:19 .cache
drwxr-xr-x 4 root root 4096 ksl 21 20:20 .config
drwxr-xr-x 3 root root 4096 ksl 3 23:03 .local
-rw-r--r-- 1 root root 148 cep 27 2019 .profile
drwxr-xr-x 3 root root 4096 ksl 3 22:02 snap

/root/.cache:
drwxr-xr-x 3 root root 4096 ksl 9 17:19 .
drwxr-xr-x 6 root root 4096 ksl 9 17:19 ..
drwxr-xr-x 2 root root 4096 ksl 9 17:19 mc

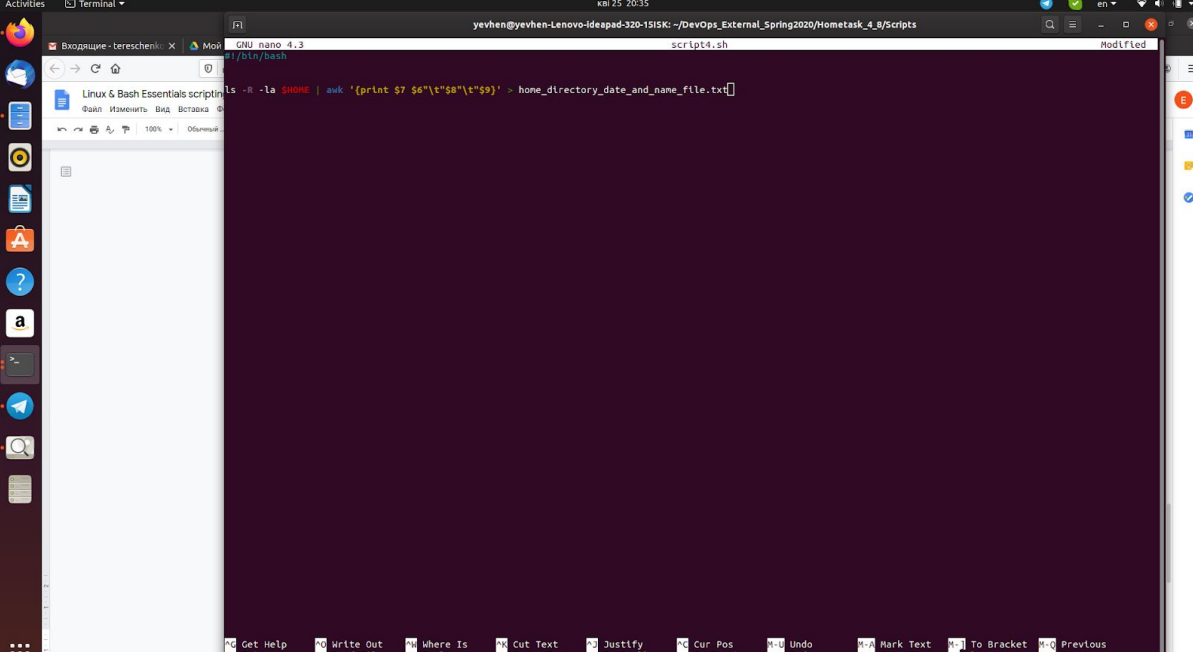
/root/.cache/mc:
drwxr-xr-x 2 root root 4096 ksl 9 17:19 .
drwxr-xr-x 3 root root 4096 ksl 9 17:19 ..

/root/.config:
drwxr-xr-x 4 root root 4096 ksl 21 20:20 .
drwxr-xr-x 6 root root 4096 ksl 9 17:19 ..
drwxr-xr-x 2 root root 4096 ksl 9 17:19 mc
-rw-r--r-- 1 root root 2984 ksl 21 21:18 Trolltech.conf
drwxr-xr-x 2 root root 4096 ksl 23 21:26 VirtualBox

/root/.config/mc:
drwxr-xr-x 2 root root 4096 ksl 9 17:19 .
drwxr-xr-x 4 root root 4096 ksl 21 20:20 ..

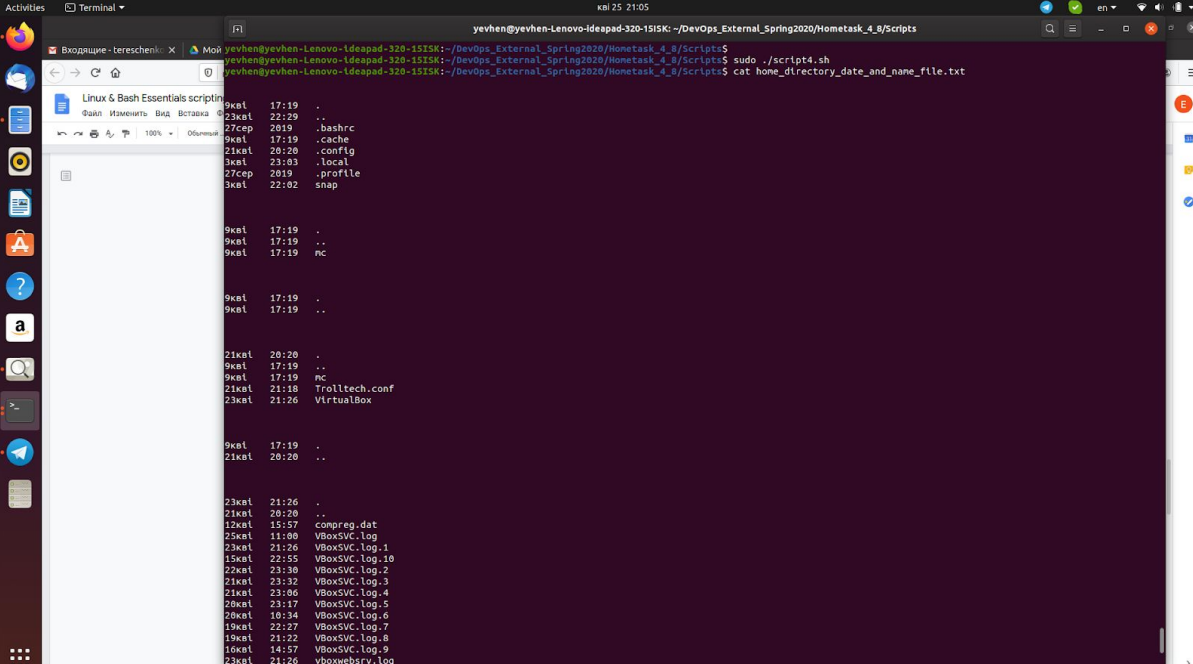
/root/.config/VirtualBox:
drwxr-xr-x 2 root root 4096 ksl 23 21:26 .
drwxr-xr-x 4 root root 4096 ksl 21 20:20 ..
-rw-r--r-- 1 root root 1184 ksl 12 15:57 compreg.dat
-rw-r--r-- 1 root root 2448 ksl 25 11:00 VBoxSVC.log
-rw-r--r-- 1 root root 2379 ksl 23 21:26 VBoxSVC.log.1
-rw-r--r-- 1 root root 2367 ksl 15 22:55 VBoxSVC.log.10
-rw-r--r-- 1 root root 2689 ksl 22 23:30 VBoxSVC.log.2
-rw-r--r-- 1 root root 2437 ksl 21 23:32 VBoxSVC.log.3
-rw-r--r-- 1 root root 2379 ksl 21 23:06 VBoxSVC.log.4
-rw-r--r-- 1 root root 2508 ksl 20 23:17 VBoxSVC.log.5
-rw-r--r-- 1 root root 2338 ksl 20 10:34 VBoxSVC.log.6
-rw-r--r-- 1 root root 468 ksl 19 22:27 VBoxSVC.log.7
-rw-r--r-- 1 root root 2587 ksl 19 21:22 VBoxSVC.log.8
-rw-r--r-- 1 root root 603 ksl 16 14:57 VBoxSVC.log.9
-rw-r--r-- 1 root root 1030 ksl 23 21:26 vboxwebsrv.log
-rw-r--r-- 1 root root 1267 ksl 23 21:25 vboxwebsrv.log.1
-rw-r--r-- 1 root root 1172 ksl 16 14:56 vboxwebsrv.log.10
-rw-r--r-- 1 root root 1267 ksl 22 23:29 vboxwebsrv.log.2
-rw-r--r-- 1 root root 1268 ksl 21 23:32 vboxwebsrv.log.3
-rw-r--r-- 1 root root 1207 ksl 21 23:06 vboxwebsrv.log.4
-rw-r--r-- 1 root root 1267 ksl 20 23:47 vboxwebsrv.log.5
```

4. Search and show columns date create file and it name



The screenshot shows a terminal window with the command `ls -lR $HOME | awk '{print $7 $6"("t"$8"("t"$9)'} > home_directory_date_and_name_file.txt` entered. The terminal title bar indicates the user is yevhen@yevhen-Lenovo-Ideapad-320-15ISK and the current directory is ~/DevOps_External_Spring2020/Hometask_4_8/Scripts. The command is being executed in a nano 4.3 editor.

```
ls -lR $HOME | awk '{print $7 $6"("t"$8"("t"$9)'} > home_directory_date_and_name_file.txt
```



The screenshot shows the terminal window after running the command. The output is a list of files and their creation dates, sorted by date. The files are listed in a table-like format with columns for date, time, and filename.

```
9knl 17:19 .
23knl 22:29 ..
27cnp 26:19 .bashrc
9knl 17:19 .cache
21knl 20:20 .config
3knl 23:03 .local
27cnp 20:19 .profile
3knl 22:02 snap

9knl 17:19 .
9knl 17:19 ..
9knl 17:19 nc

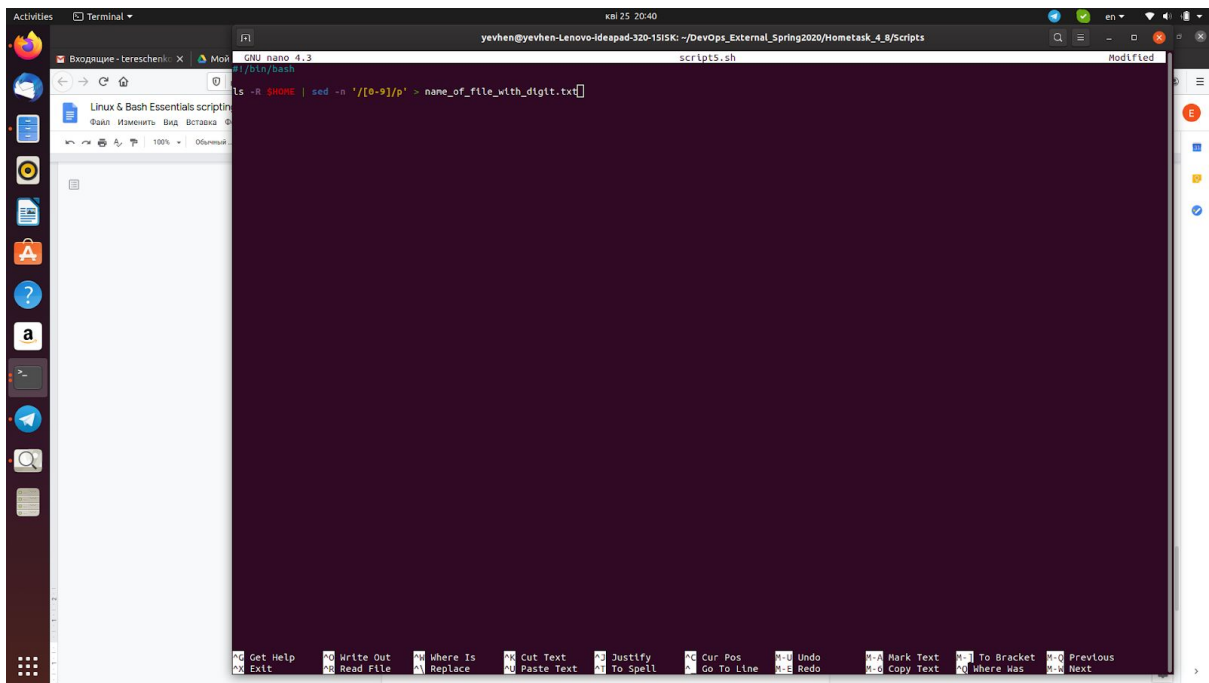
9knl 17:19 .
9knl 17:19 ..

21knl 20:20 .
9knl 17:19 ..
9knl 17:19 nc
21knl 21:18 Trolltech.conf
23knl 21:26 VirtualBox

9knl 17:19 .
21knl 20:20 ..

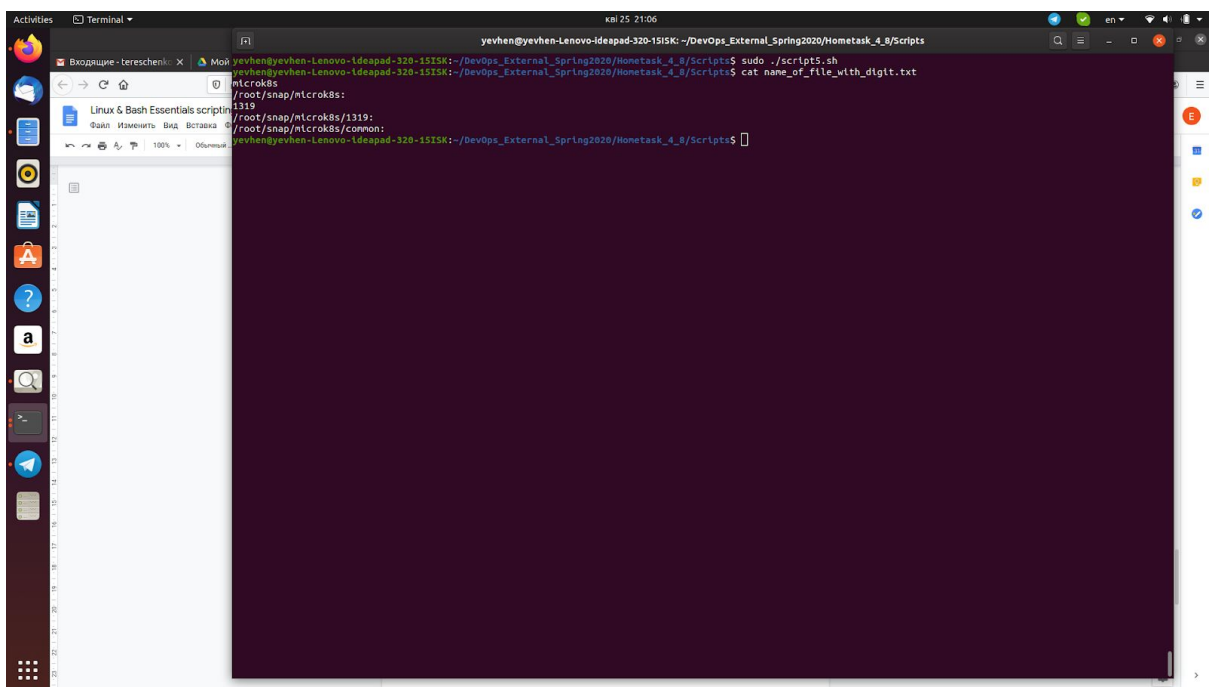
23knl 21:26 .
21knl 20:20 ..
12knl 15:57 compreg.dat
25knl 11:00 VBoxSVC.log
23knl 21:26 VBoxSVC.log.1
15knl 22:55 VBoxSVC.log.10
22knl 23:30 VBoxSVC.log.2
21knl 23:32 VBoxSVC.log.3
21knl 23:06 VBoxSVC.log.4
20knl 23:17 VBoxSVC.log.5
20knl 10:34 VBoxSVC.log.6
19knl 22:27 VBoxSVC.log.7
19knl 21:22 VBoxSVC.log.8
16knl 14:57 VBoxSVC.log.9
23knl 21:26 vboxwebsrv.log
```

5. Search and show all file name with digit.



A terminal window showing the execution of a command in a nano editor. The command is `sed -n '/[0-9]/p' > name_of_file_with_digit.txt`. The terminal title bar indicates the user is yevhen@yevhen-Lenovo-Ideapad-320-15ISK and the current directory is ~/DevOps_External_Spring2020/Hometask_4_8/Scripts. The nano editor interface is visible with various menu options at the bottom.

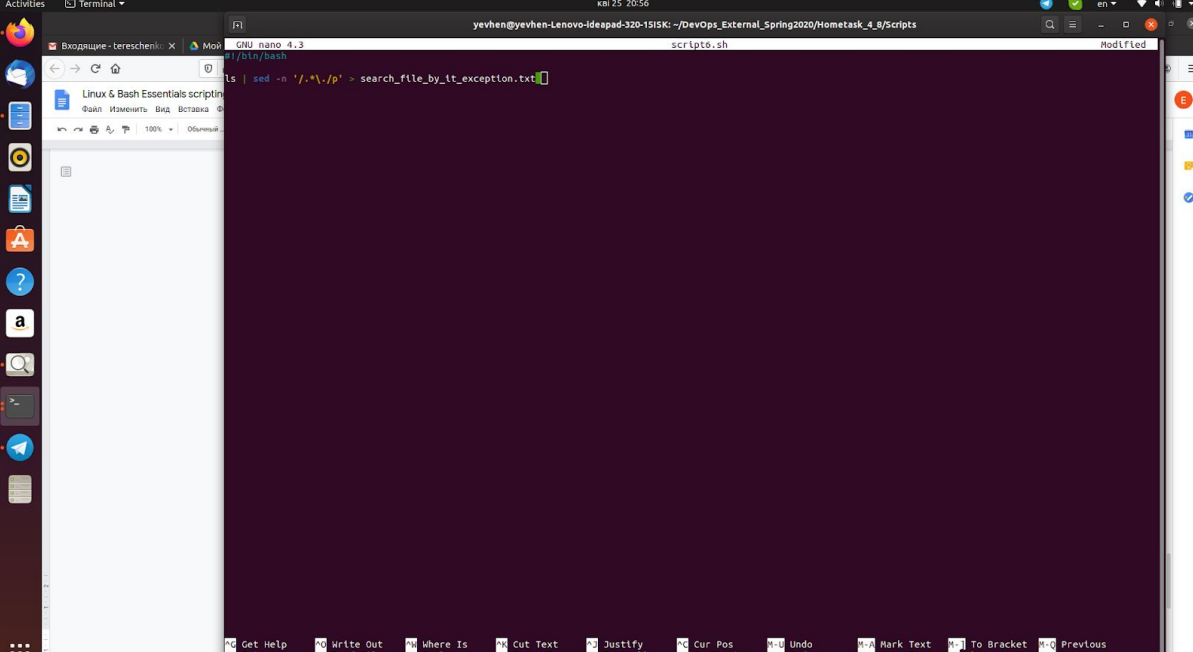
```
GNU nano 4.3 scripts.sh
sed -n '/[0-9]/p' > name_of_file_with_digit.txt
```



A terminal window showing the execution of a script and the use of `cat` to display the file contents. The terminal title bar indicates the user is yevhen@yevhen-Lenovo-Ideapad-320-15ISK and the current directory is ~/DevOps_External_Spring2020/Hometask_4_8/Scripts. The terminal shows the following commands and output:

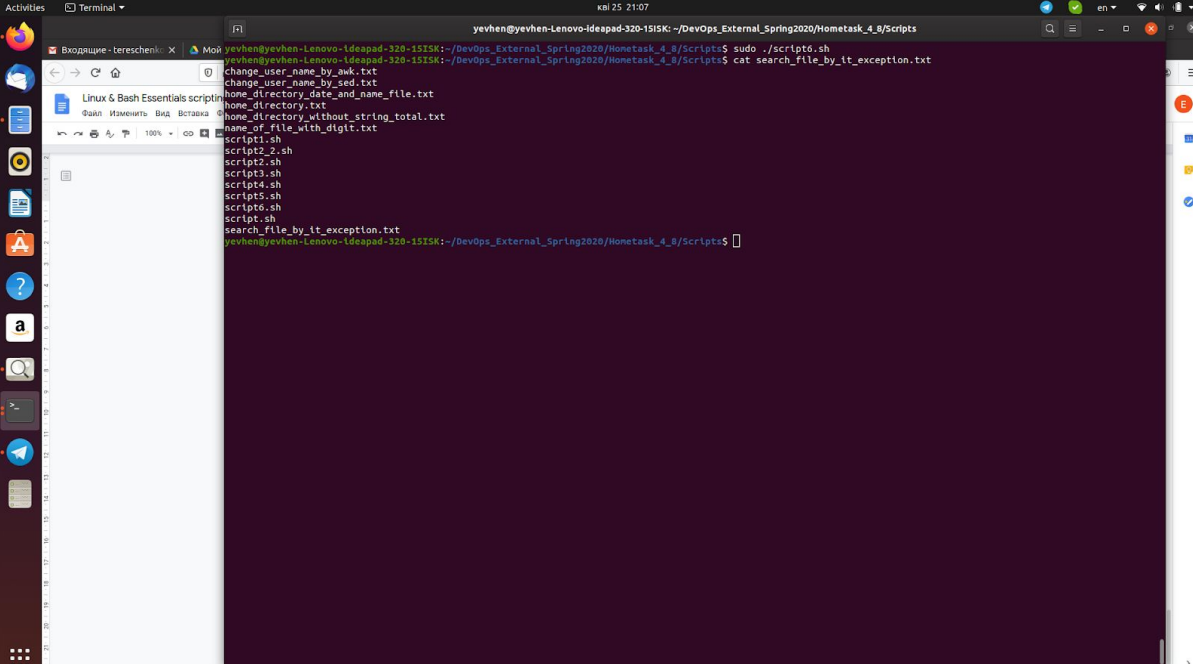
```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK:~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./scripts.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK:~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat name_of_file_with_digit.txt
```

6. Search and show all files with exception



The screenshot shows a terminal window with the nano text editor open. The command `ls | sed -n '/.*\./p' > search_file_by_it_exception.txt` is being entered at the prompt. The terminal title bar indicates the user is yevhen@yevhen-Lenovo-Ideapad-320-15ISK and the current directory is ~/DevOps_External_Spring2020/Hometask_4_8/Scripts. The nano editor's status bar at the bottom shows various editing functions like Get Help, Write Out, Read File, etc.

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts
GNU nano 4.3
ls | sed -n '/.*\./p' > search_file_by_it_exception.txt
```



The screenshot shows the same terminal window after the command `cat search_file_by_it_exception.txt` has been executed. The output lists several files and scripts, including `change_user_name_by_awk.txt`, `change_user_name_by_sed.txt`, `home_directory_date_and_name_file.txt`, `home_directory.txt`, `home_directory_without_string_total.txt`, `name_of_file_with_digit.txt`, `script1.sh`, `script2.2.sh`, `script2.sh`, `script3.sh`, `script4.sh`, `script5.sh`, `script6.sh`, and `search_file_by_it_exception.txt`. The terminal title bar and nano editor status bar are also visible.

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts
change_user_name_by_awk.txt
change_user_name_by_sed.txt
home_directory_date_and_name_file.txt
home_directory.txt
home_directory_without_string_total.txt
name_of_file_with_digit.txt
script1.sh
script2.2.sh
script2.sh
script3.sh
script4.sh
script5.sh
script6.sh
search_file_by_it_exception.txt
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$
```