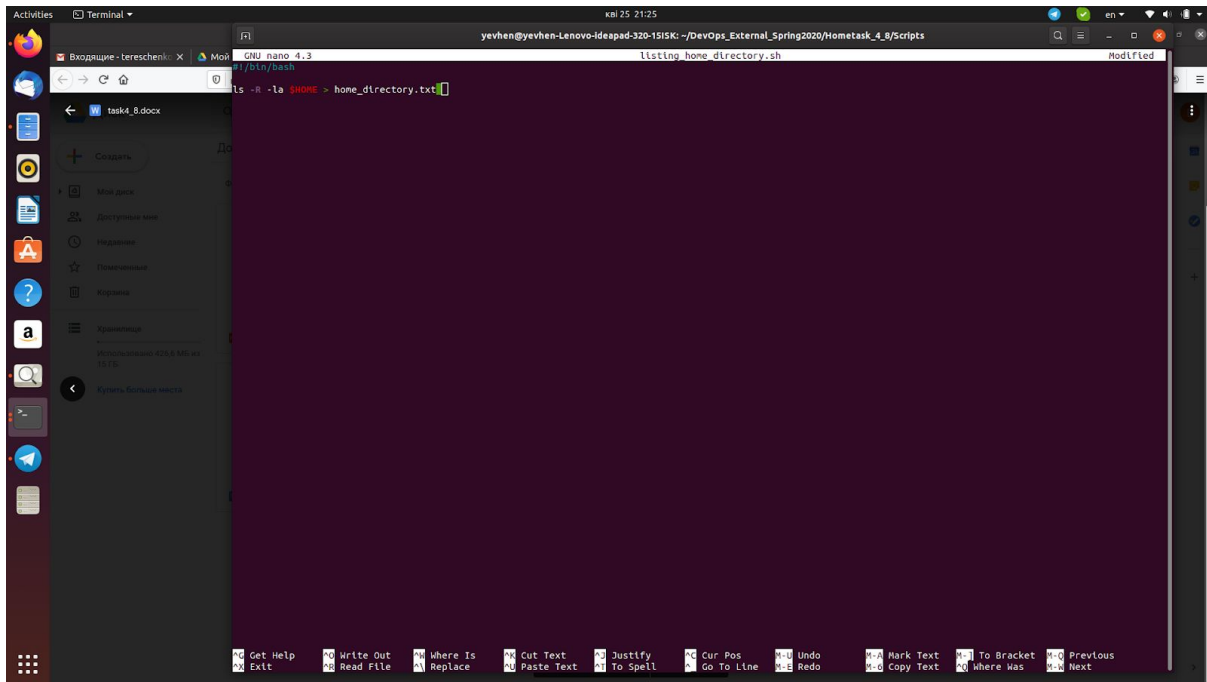


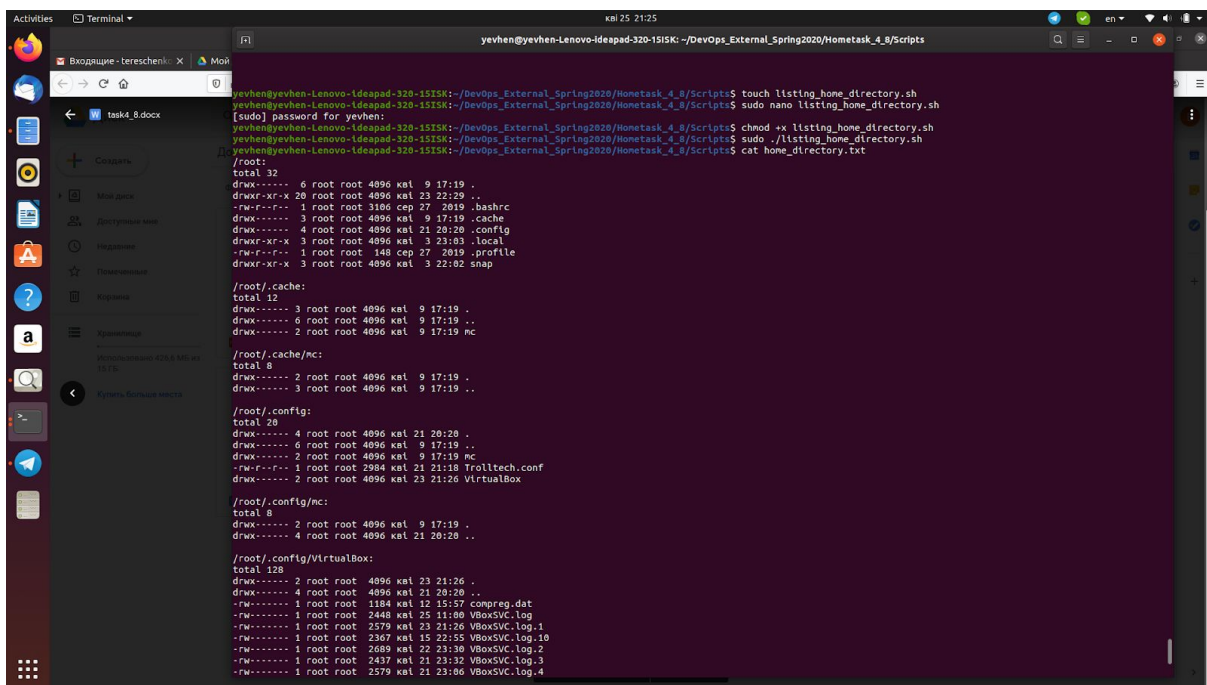
Linux & Bash Essentials

Scripting

1. Create file with result extended recursive listing homedirectory



```
yeven@yeven-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts
ls -R -la $HOME > home_directory.txt
```



```
yeven@yeven-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts
touch listing_home_directory.sh
yeven@yeven-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano listing_home_directory.sh
[sudo] password for yeven:
yeven@yeven-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x listing_home_directory.sh
yeven@yeven-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat home_directory.txt
/root:
total 32
drwxr-xr-x 6 root root 4096 ka1 9 17:19 .
drwxr-xr-x 20 root root 4096 ka1 23 22:29 ..
-rw-r--r-- 1 root root 3106 cep 27 2019 .bashrc
drwxr-xr-x 3 root root 4096 ka1 9 17:19 .cache
drwxr-xr-x 4 root root 4096 ka1 21 20:20 .config
drwxr-xr-x 3 root root 4096 ka1 3 23:03 .local
-rw-r--r-- 1 root root 148 cep 27 2019 .profile
drwxr-xr-x 3 root root 4096 ka1 3 22:02 snap

/root/.cache:
total 12
drwxr-xr-x 3 root root 4096 ka1 9 17:19 .
drwxr-xr-x 6 root root 4096 ka1 9 17:19 ..
drwxr-xr-x 2 root root 4096 ka1 9 17:19 nc

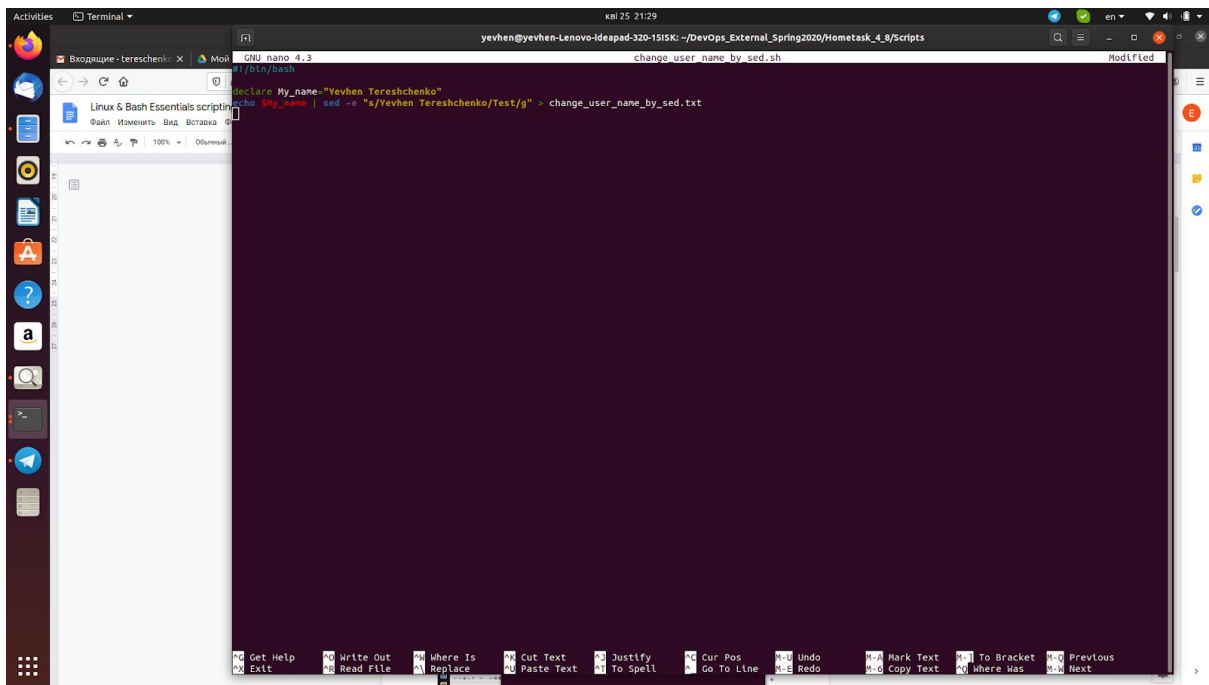
/root/.cache/nc:
total 8
drwxr-xr-x 2 root root 4096 ka1 9 17:19 .
drwxr-xr-x 3 root root 4096 ka1 9 17:19 ..

/root/.config:
total 20
drwxr-xr-x 4 root root 4096 ka1 21 20:20 .
drwxr-xr-x 6 root root 4096 ka1 9 17:19 ..
drwxr-xr-x 2 root root 4096 ka1 9 17:19 mc
-rw-r--r-- 1 root root 2984 ka1 21 21:18 Trolltech.conf
drwxr-xr-x 2 root root 4096 ka1 23 21:26 VirtualBox

/root/.config/mc:
total 8
drwxr-xr-x 2 root root 4096 ka1 9 17:19 .
drwxr-xr-x 4 root root 4096 ka1 21 20:20 ..

/root/.config/VirtualBox:
total 128
drwxr-xr-x 2 root root 4096 ka1 23 21:26 .
drwxr-xr-x 4 root root 4096 ka1 21 20:20 ..
-rw-r--r-- 1 root root 1184 ka1 12 15:57 compreg.dat
-rw-r--r-- 1 root root 2448 ka1 25 11:00 VBoxSVC.log
-rw-r--r-- 1 root root 2579 ka1 23 21:26 VBoxSVC.log.1
-rw-r--r-- 1 root root 2307 ka1 15 22:55 VBoxSVC.log.10
-rw-r--r-- 1 root root 2689 ka1 22 23:30 VBoxSVC.log.2
-rw-r--r-- 1 root root 2437 ka1 21 23:32 VBoxSVC.log.3
-rw-r--r-- 1 root root 2579 ka1 21 23:06 VBoxSVC.log.4
```

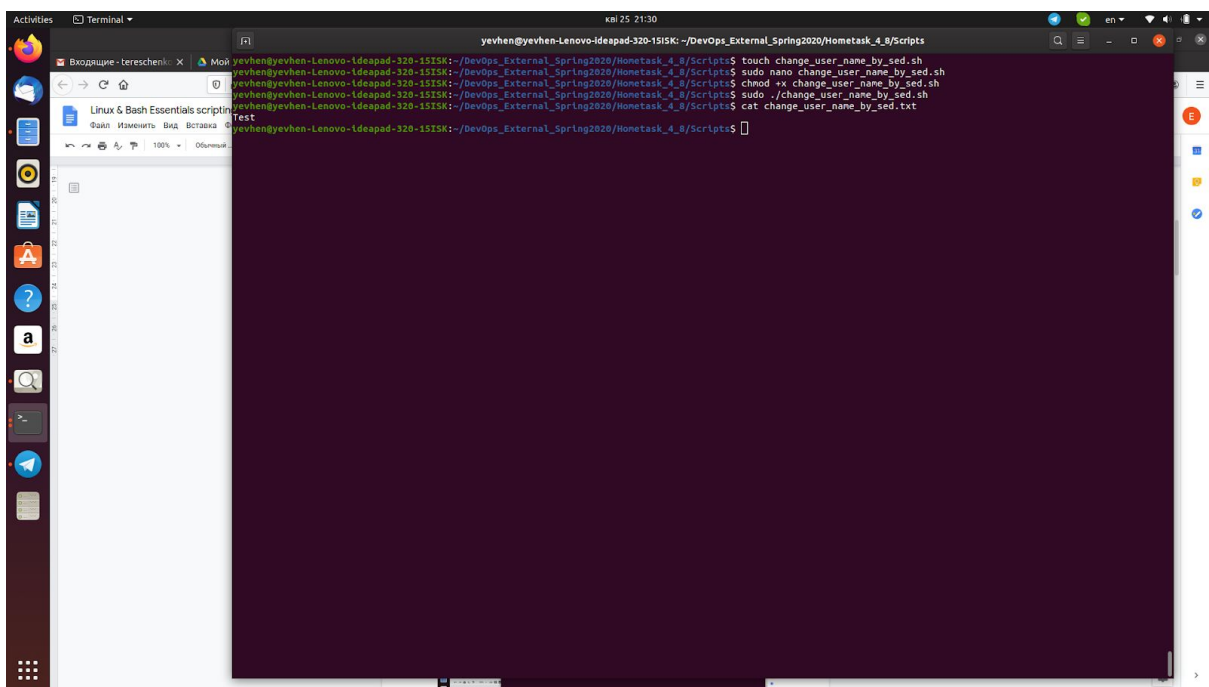
2.a.Change name of user to another with sed.



The screenshot shows a terminal window with the following commands and output:

```
GNU nano 4.3  
#!/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 "Terminal" and shows the user "yevhen" on a system named "yevhen-Lenovo-Ideapad-320-15ISK". The current directory is "~/DevOps_External_Spring2020/Hometask_4_8/Scripts".

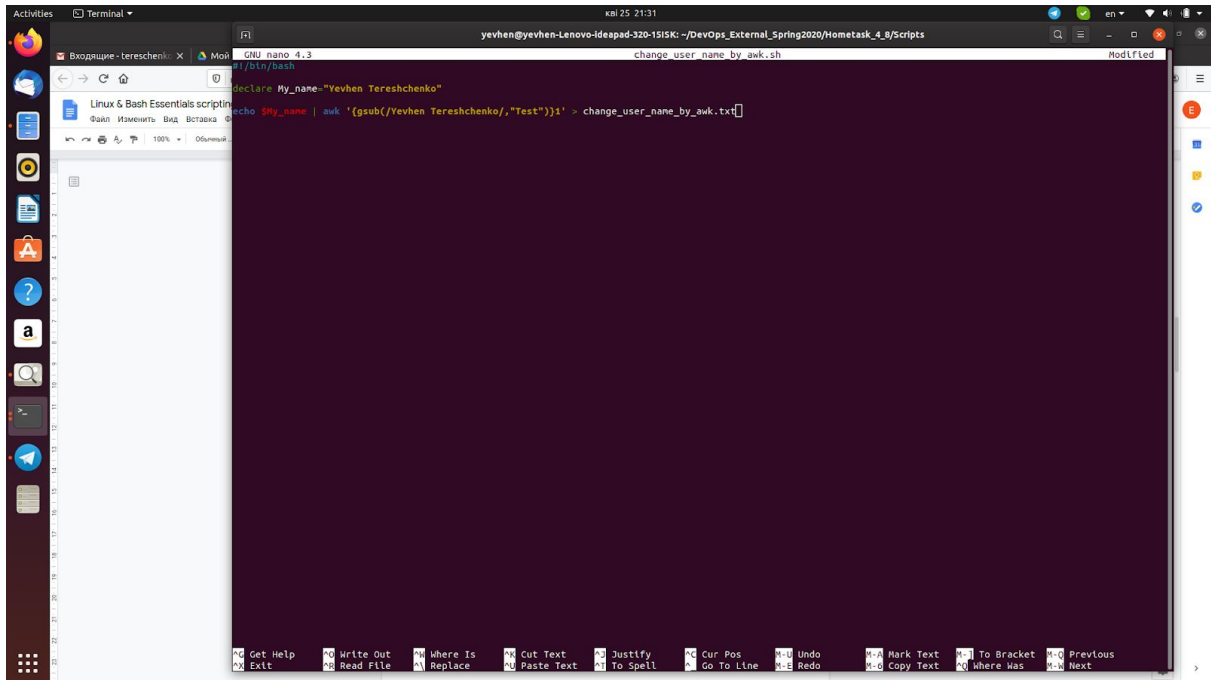


The screenshot shows a terminal window with the following commands and output:

```
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$ touch change_user_name_by_sed.sh  
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano change_user_name_by_sed.sh  
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x change_user_name_by_sed.sh  
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./change_user_name_by_sed.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$
```

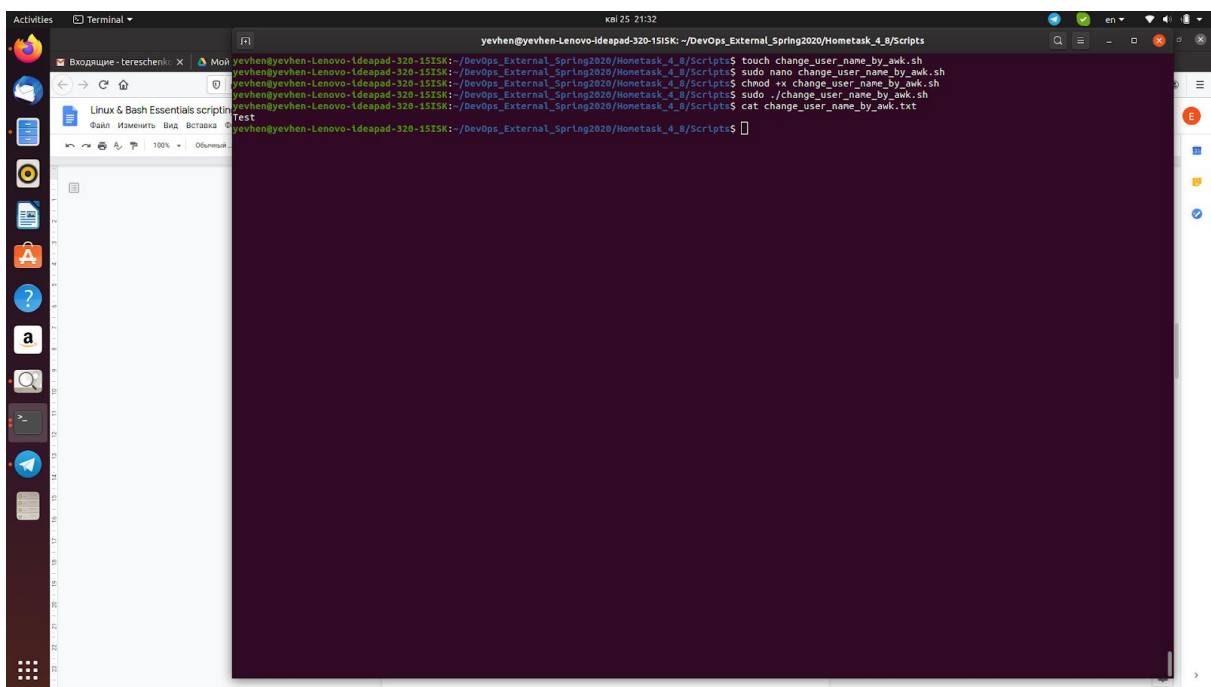
The terminal window is titled "Terminal" and shows the user "yevhen" on a system named "yevhen-Lenovo-Ideapad-320-15ISK". The current directory is "~/DevOps_External_Spring2020/Hometask_4_8/Scripts".

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



The screenshot shows a terminal window with the GNU nano 4.3 editor open. The script 'change_user_name_by_awk.sh' is being edited. It contains a variable declaration for 'My_name' and an echo command that uses awk to replace 'Yevhen Tereshchenko' with 'Test' in a file named 'change_user_name_by_awk.txt'.

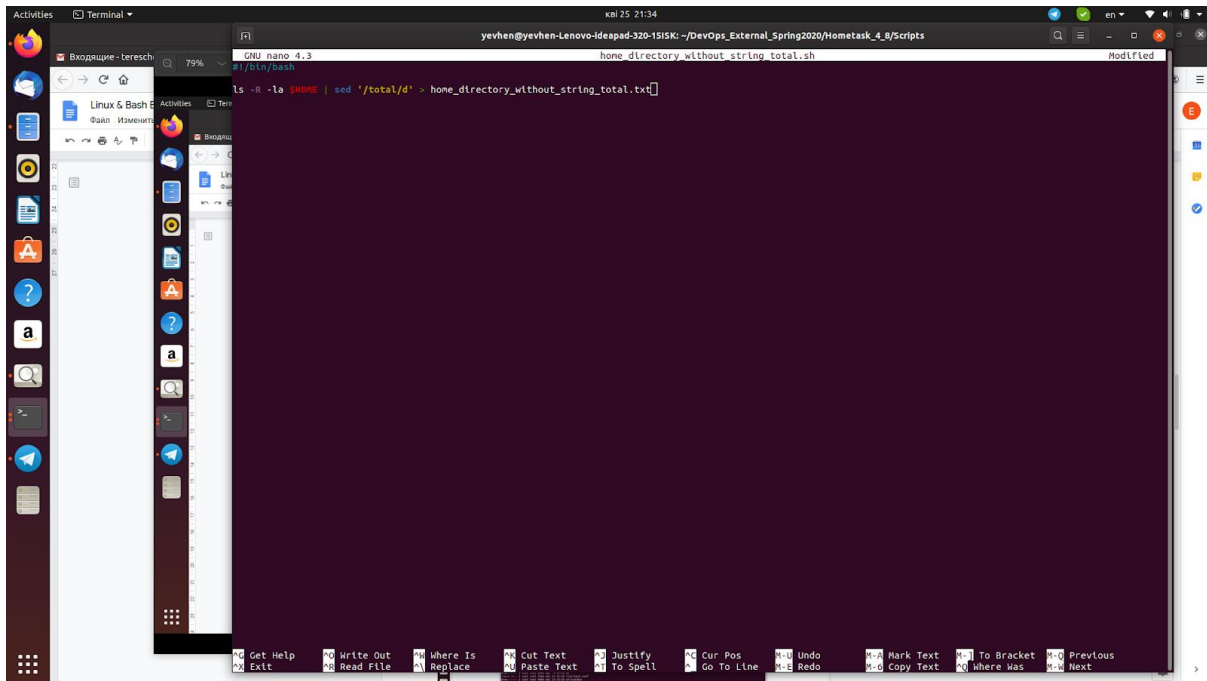
```
#!/bin/bash
declare My_name="Yevhen Tereshchenko"
echo $My_name | awk '{gsub(/Yevhen Tereshchenko/, "Test")}' > change_user_name_by_awk.txt
```



The screenshot shows the terminal window after the script has been executed. The user has run 'touch change_user_name_by_awk.sh', 'sudo nano change_user_name_by_awk.sh', 'chmod +x change_user_name_by_awk.sh', and './change_user_name_by_awk.sh'. Finally, they run 'cat change_user_name_by_awk.txt' to verify the output, which shows 'Test'.

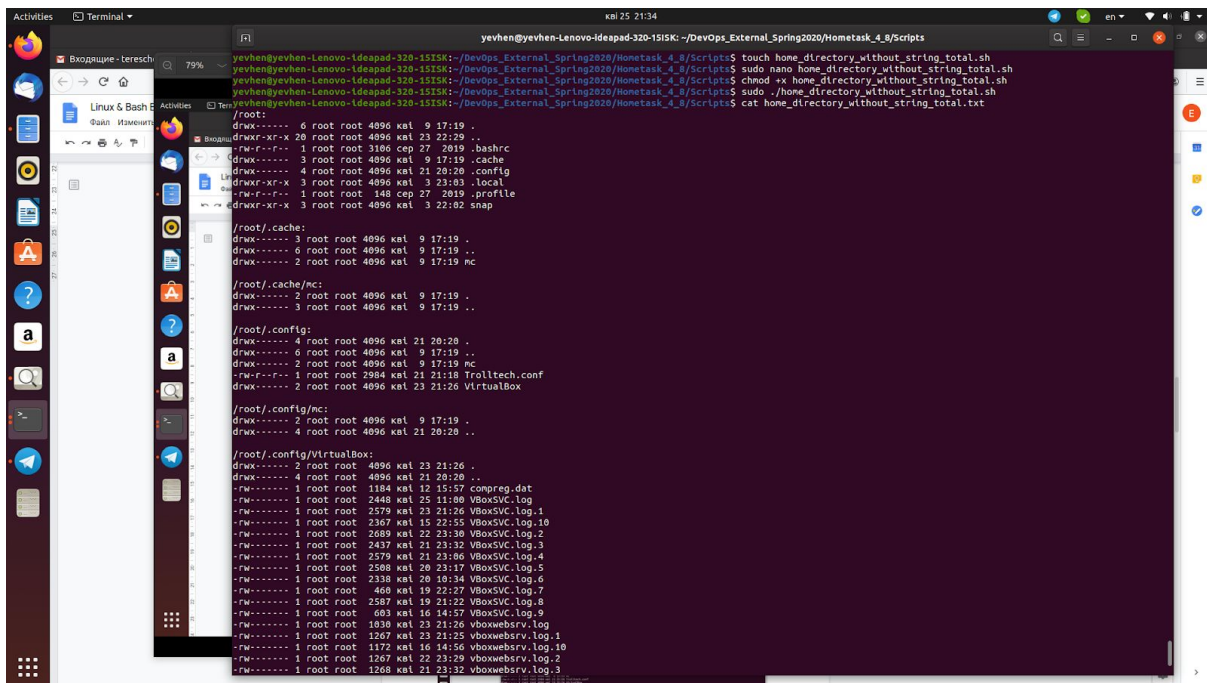
```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ touch change_user_name_by_awk.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano change_user_name_by_awk.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x change_user_name_by_awk.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./change_user_name_by_awk.sh
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$
```

3.Delete string with total quantity of file



The screenshot shows a terminal window with the command `ls -l -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.

```
GNU nano 4.3 home_directory_without_string_total.sh
#!/bin/bash
ls -l -la $HOME | sed '/total/d' > home_directory_without_string_total.txt
```



The screenshot shows a terminal window with the command `cat home_directory_without_string_total.txt` being executed. The terminal output shows the command being run and the file being created.

```
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$ touch home_directory_without_string_total.sh
yevhen@yevhen-Lenovo-IdeaPad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano home_directory_without_string_total.sh
yevhen@yevhen-Lenovo-IdeaPad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x home_directory_without_string_total.sh
yevhen@yevhen-Lenovo-IdeaPad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./home_directory_without_string_total.sh
yevhen@yevhen-Lenovo-IdeaPad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat home_directory_without_string_total.txt
drwx----- 6 root root 4096 kst 9 17:19 .
drwxr-xr-x 20 root root 4096 kst 23 22:29 ..
-rw-r--r-- 1 root root 3186 cep 27 2019 .bashrc
drwx----- 3 root root 4096 kst 9 17:19 .cache
drwx----- 4 root root 4096 kst 21 20:20 .config
drwxr-xr-x 3 root root 4096 kst 3 23:03 .local
-rw-r--r-- 1 root root 148 cep 27 2019 .profile
drwxr-xr-x 3 root root 4096 kst 3 22:02 snap

/root/.cache:
drwx----- 3 root root 4096 kst 9 17:19 .
drwx----- 6 root root 4096 kst 9 17:19 ..
drwx----- 2 root root 4096 kst 9 17:19 mc

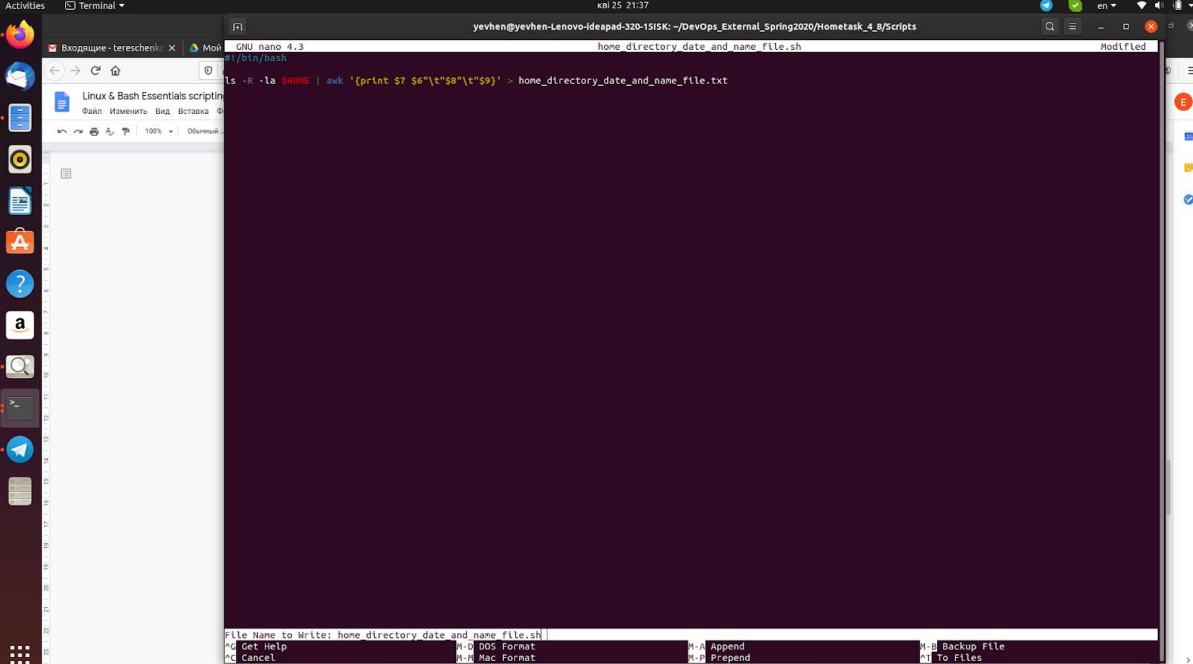
/root/.cache/mc:
drwx----- 2 root root 4096 kst 9 17:19 .
drwx----- 3 root root 4096 kst 9 17:19 ..

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

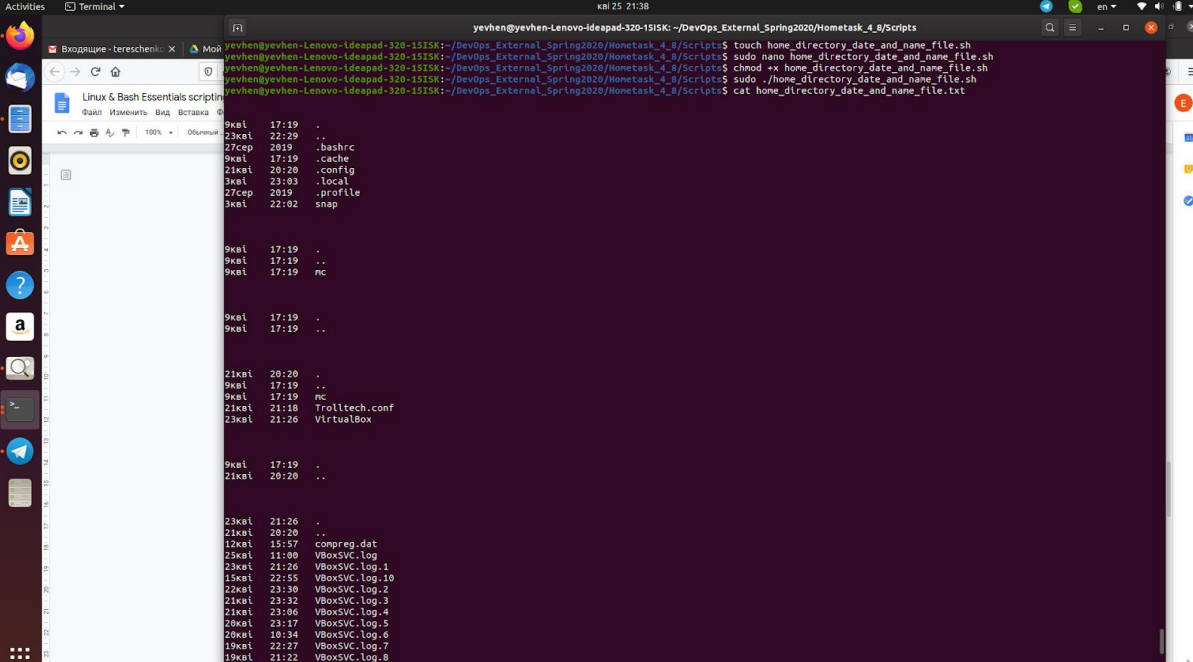
/root/.config/mc:
drwx----- 2 root root 4096 kst 9 17:19 .
drwx----- 4 root root 4096 kst 21 20:20 ..

/root/.config/VirtualBox:
drwx----- 2 root root 4096 kst 23 21:26 .
drwx----- 4 root root 4096 kst 21 20:20 ..
-rw----- 1 root root 1184 kst 12 15:57 compreg.dat
-rw----- 1 root root 2448 kst 25 11:00 VBoxSVC.log
-rw----- 1 root root 2579 kst 23 21:26 VBoxSVC.log.1
-rw----- 1 root root 2367 kst 15 22:55 VBoxSVC.log.10
-rw----- 1 root root 2689 kst 22 23:30 VBoxSVC.log.2
-rw----- 1 root root 2437 kst 21 23:30 VBoxSVC.log.3
-rw----- 1 root root 2579 kst 21 23:06 VBoxSVC.log.4
-rw----- 1 root root 2588 kst 20 23:17 VBoxSVC.log.5
-rw----- 1 root root 2338 kst 20 16:34 VBoxSVC.log.6
-rw----- 1 root root 460 kst 19 22:27 VBoxSVC.log.7
-rw----- 1 root root 2587 kst 19 21:22 VBoxSVC.log.8
-rw----- 1 root root 683 kst 16 14:57 VBoxSVC.log.9
-rw----- 1 root root 1030 kst 23 21:26 vboxwebsrv.log
-rw----- 1 root root 1267 kst 23 21:25 vboxwebsrv.log.1
-rw----- 1 root root 1172 kst 16 14:56 vboxwebsrv.log.10
-rw----- 1 root root 1267 kst 22 23:29 vboxwebsrv.log.2
-rw----- 1 root root 1268 kst 21 23:32 vboxwebsrv.log.3
```

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



```
GNU nano 4.3 home_directory_date_and_name_file.sh
ls -la $HOME | awk '{print $7 $6"\"$8"\"$9"}' > home_directory_date_and_name_file.txt
File Name to Write: home_directory_date_and_name_file.sh
Get Help  Cancel  GNU Format  Mac Format  Append  Prepend  Backup File  To Files
```



```
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$ touch home_directory_date_and_name_file.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano home_directory_date_and_name_file.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x home_directory_date_and_name_file.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ ./home_directory_date_and_name_file.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat home_directory_date_and_name_file.txt
9kai 17:19 .
21kai 22:29 ..
27sep 2019 .bashrc
9kai 17:19 .cache
21kai 20:20 .config
3kai 23:03 .local
27sep 2019 .profile
3kai 22:02 snap

9kai 17:19 .
9kai 17:19 ..

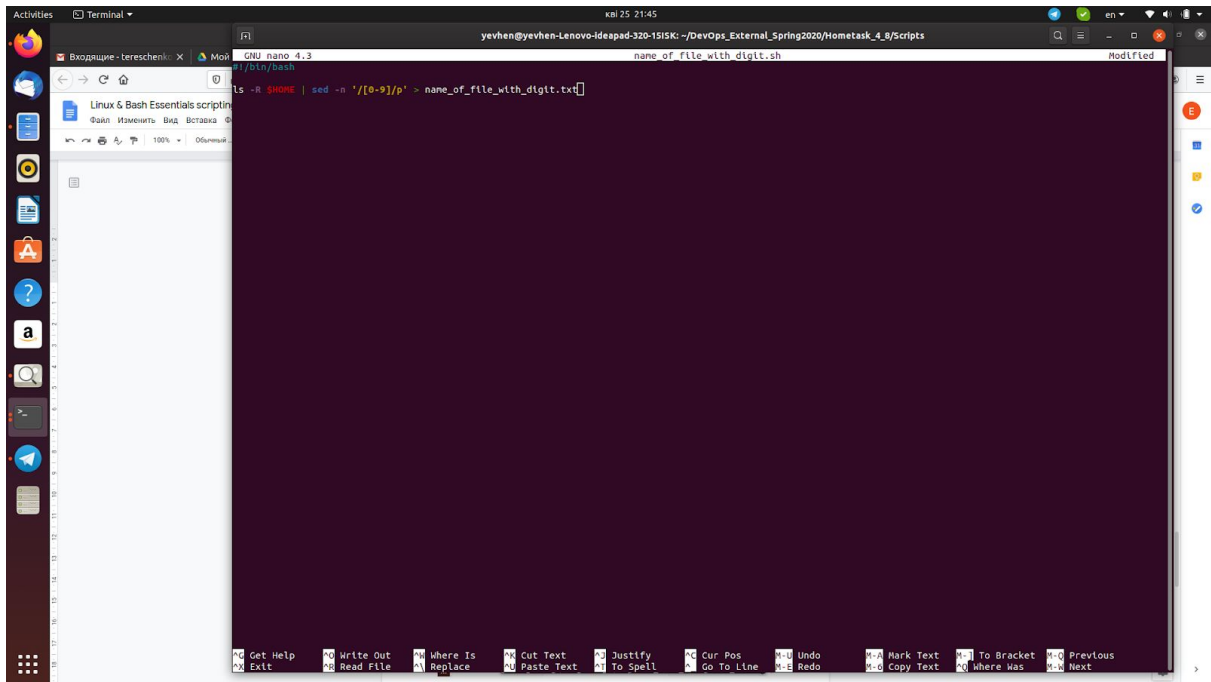
9kai 17:19 .
9kai 17:19 ..

21kai 20:20 .
9kai 17:19 ..
9kai 17:19 nc
21kai 21:10 Trolltech.conf
23kai 21:26 VirtualBox

9kai 17:19 .
21kai 20:20 ..

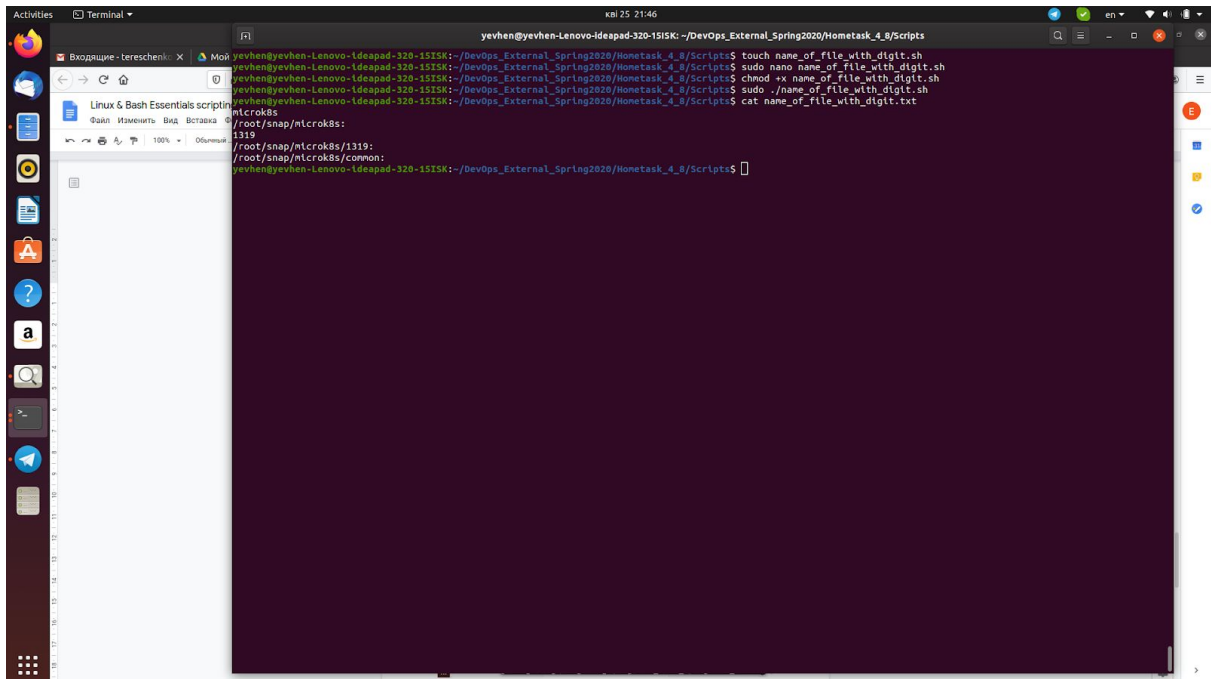
23kai 21:26 .
21kai 20:20 ..
12kai 15:57 compreg.dat
23kai 14:00 VBoxSVC.log
23kai 21:26 VBoxSVC.log.1
15kai 22:55 VBoxSVC.log.10
22kai 23:30 VBoxSVC.log.2
21kai 23:32 VBoxSVC.log.3
21kai 23:06 VBoxSVC.log.4
20kai 23:17 VBoxSVC.log.5
20kai 10:34 VBoxSVC.log.6
19kai 22:27 VBoxSVC.log.7
19kai 21:22 VBoxSVC.log.8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

5. Search and show all file name with digit.



A terminal window showing the command `ls -R $HOME | sed -n '/[0-9]/p' > name_of_file_with_digit.txt` being executed. The terminal output is empty, indicating that no files with digits in their names were found in the specified directory.

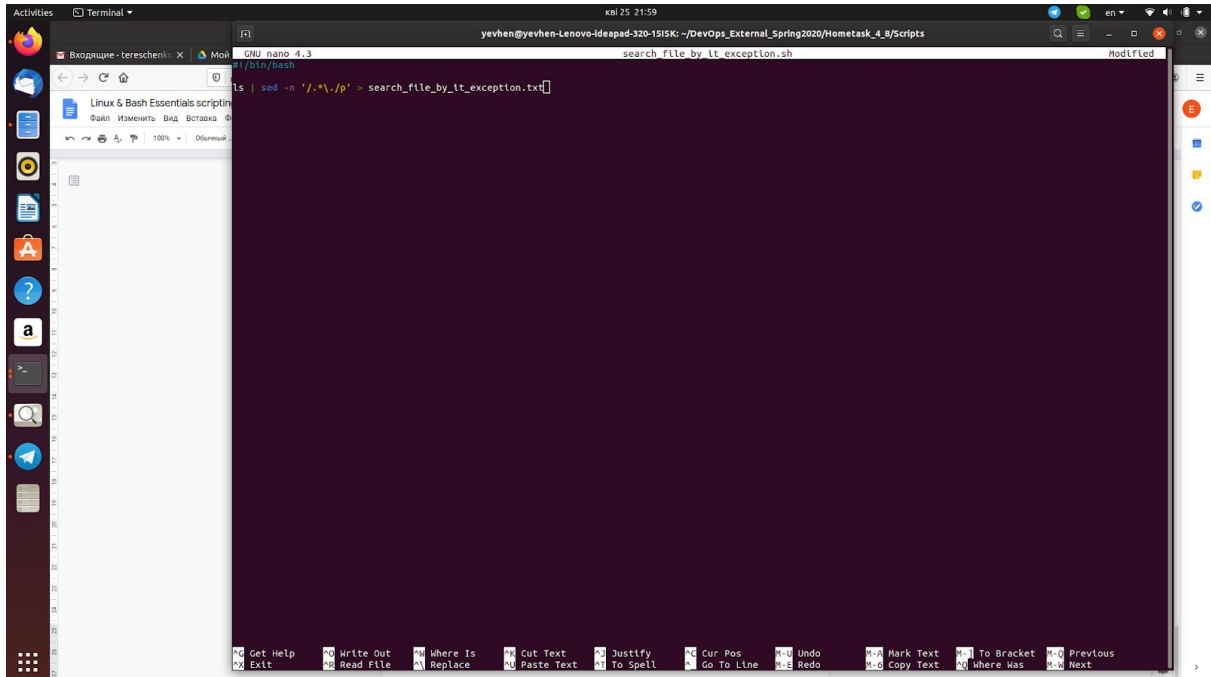
```
GNU nano 4.3 name_of_file_with_digit.sh
ls -R $HOME | sed -n '/[0-9]/p' > name_of_file_with_digit.txt
```



A terminal window showing the command `ls -R $HOME | sed -n '/[0-9]/p' > name_of_file_with_digit.txt` being executed. The terminal output is empty, indicating that no files with digits in their names were found in the specified directory.

```
GNU nano 4.3 name_of_file_with_digit.sh
ls -R $HOME | sed -n '/[0-9]/p' > name_of_file_with_digit.txt
```

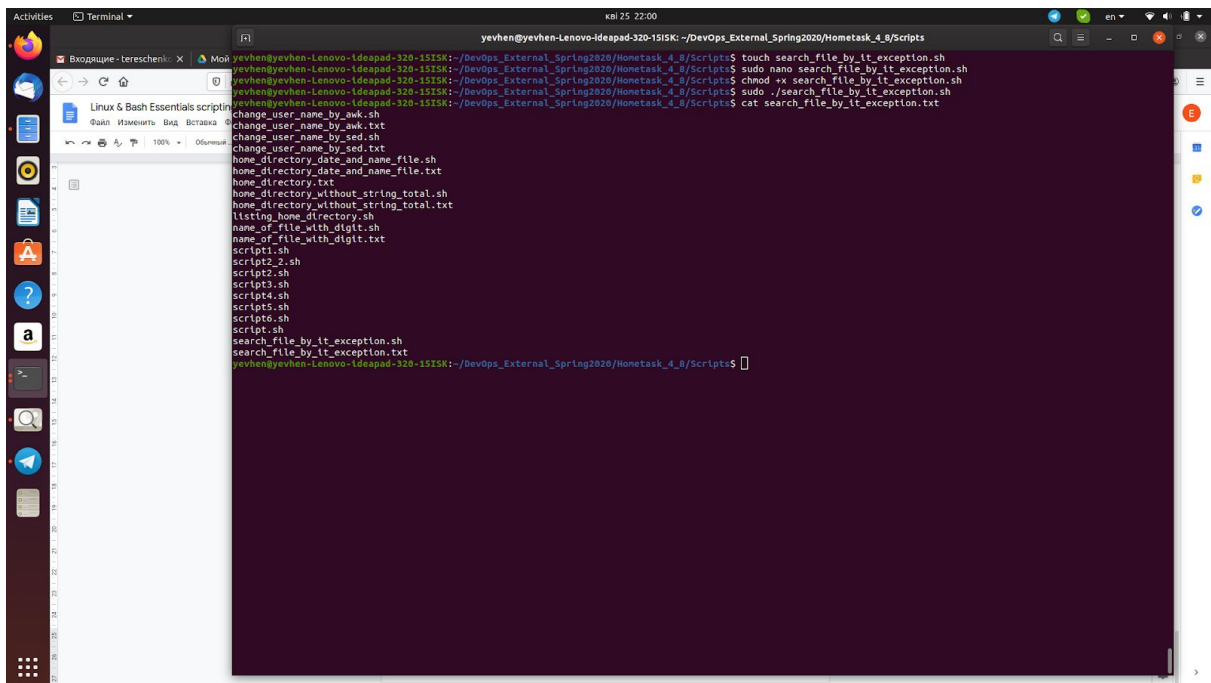

6. Search and show all files with exception



The screenshot shows a terminal window with the following commands and output:

```
search_file_by_it_exception.sh
ls | sed -n '/.*\./p' > search_file_by_it_exception.txt
```

The terminal window is titled "yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts". The left sidebar shows a file manager with a list of files and folders.



The screenshot shows a terminal window with the following commands and output:

```
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ touch search_file_by_it_exception.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo nano search_file_by_it_exception.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ chmod +x search_file_by_it_exception.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ sudo ./search_file_by_it_exception.sh
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$ cat search_file_by_it_exception.txt
change_user_name_by_awk.txt
change_user_name_by_sed.sh
change_user_name_by_sed.txt
home_directory_date_and_name_file.sh
home_directory_date_and_name_file.txt
home_directory.txt
home_directory_without_string_total.sh
home_directory_without_string_total.txt
listing_home_directory.sh
name_of_file_with_digit.sh
name_of_file_with_digit.txt
script1.sh
script2_2.sh
script2.sh
script3.sh
script4.sh
script5.sh
script6.sh
script.sh
search_file_by_it_exception.sh
search_file_by_it_exception.txt
yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts$
```

The terminal window is titled "yevhen@yevhen-Lenovo-Ideapad-320-15ISK: ~/DevOps_External_Spring2020/Hometask_4_8/Scripts". The left sidebar shows a file manager with a list of files and folders.