

Operációs rendszerek BSc

3. gyakorlat

Készítette:

Nemesi Gergely Tibor
Üzemmérnök-informatikus
Neptun: ILZGJC

2022.02.21

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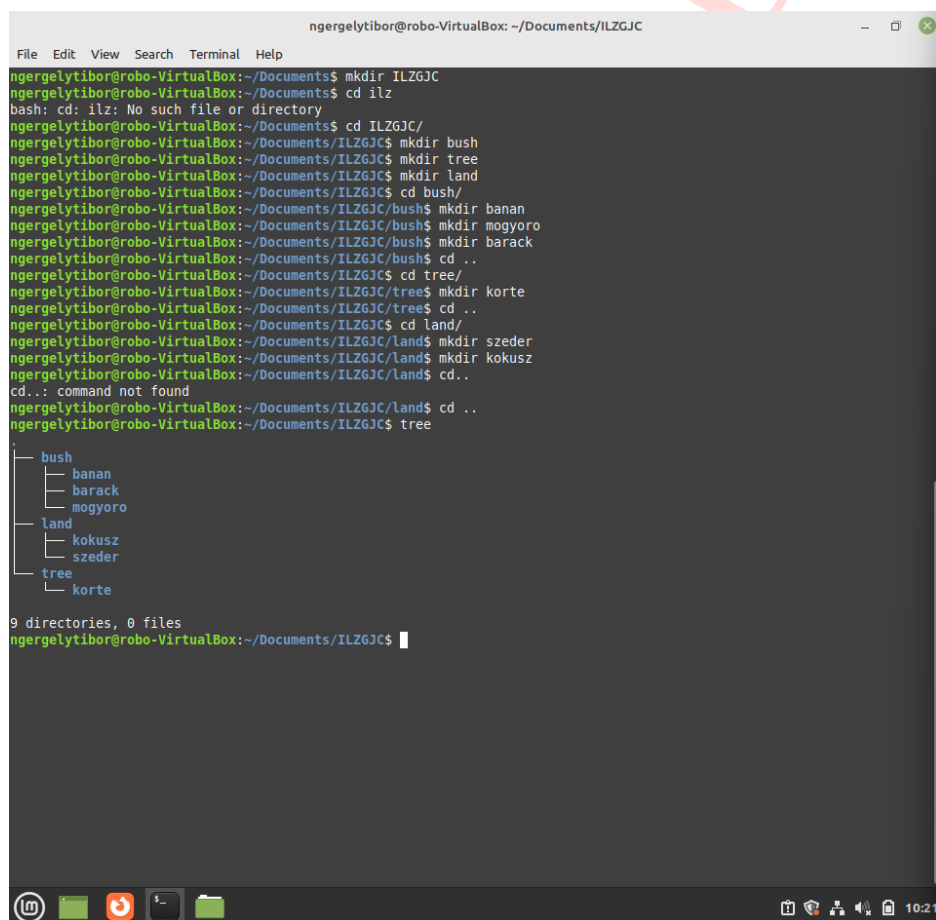
Part I

Linux

Készítse el a következő feladatokat!

1. feladat

Hozza létre a következő jegyzék szerkezetet, majd listázza ki.



```
ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC
File Edit View Search Terminal Help
ngergelytibor@robo-VirtualBox:~/Documents$ mkdir ILZGJC
ngergelytibor@robo-VirtualBox:~/Documents$ cd ilz
bash: cd: ilz: No such file or directory
ngergelytibor@robo-VirtualBox:~/Documents$ cd ILZGJC/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ mkdir bush
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ mkdir tree
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ mkdir land
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cd bush/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush$ mkdir banan
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush$ mkdir mogyoro
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush$ mkdir barack
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush$ cd ..
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cd tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ mkdir korte
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ cd ..
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cd land/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/land$ mkdir szeder
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/land$ mkdir kokusz
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/land$ cd..
cd..: command not found
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/land$ cd ..
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ tree

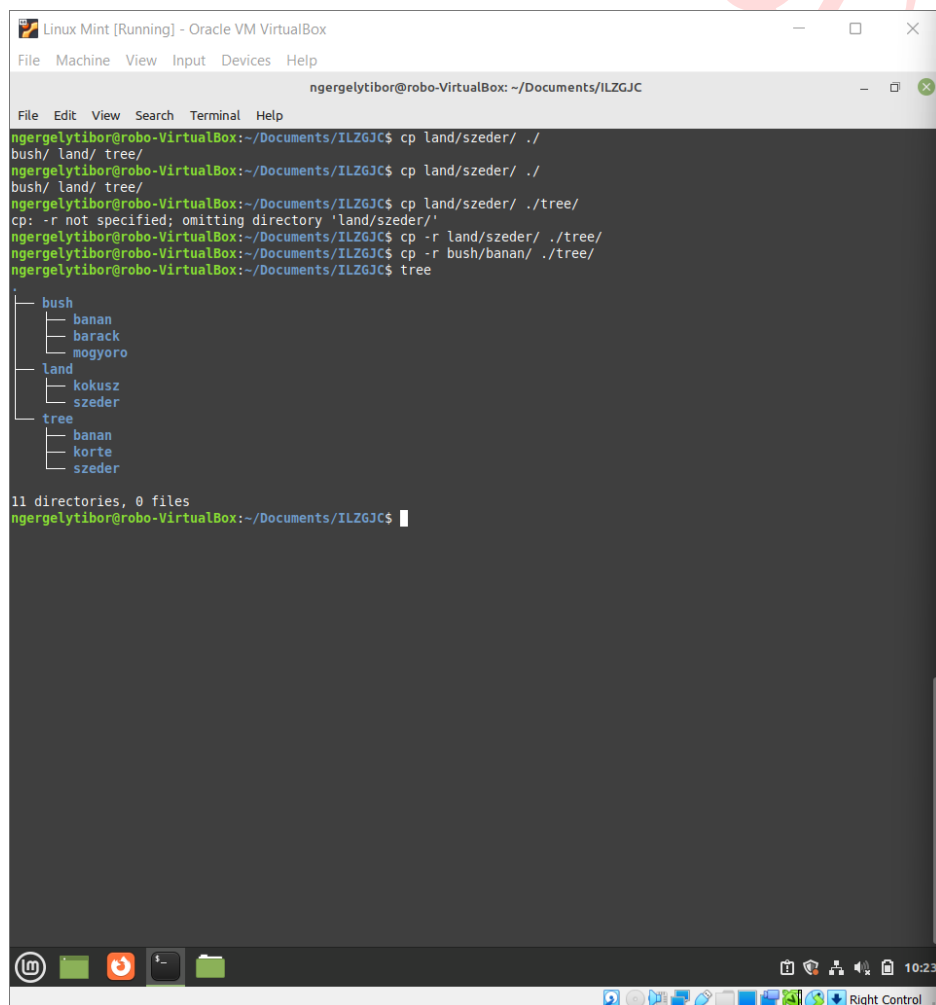
├── bush
│   ├── banan
│   ├── barack
│   └── mogyoro
├── land
│   ├── kokusz
│   └── szeder
└── tree
    └── korte

9 directories, 0 files
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$
```

2. feladat

Készítsen másolatot:

- a neptunkod/ land/szeder katalógusról a neptunkod/tree katalógusba
- a neptunkod /bush/banan katalógusról a neptunkod /tree katalógusba



The screenshot shows a terminal window titled "Linux Mint [Running] - Oracle VM VirtualBox". The user is logged in as "ngergelytibor@robo-VirtualBox" and is in the directory "~/Documents/ILZGJC". The terminal shows the following commands and output:

```
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cp land/szeder/ ./
bush/ land/ tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cp land/szeder/ ./
bush/ land/ tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cp land/szeder/ ./tree/
cp: -r not specified; omitting directory 'land/szeder/'
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cp -r land/szeder/ ./tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cp -r bush/banan/ ./tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ tree
```

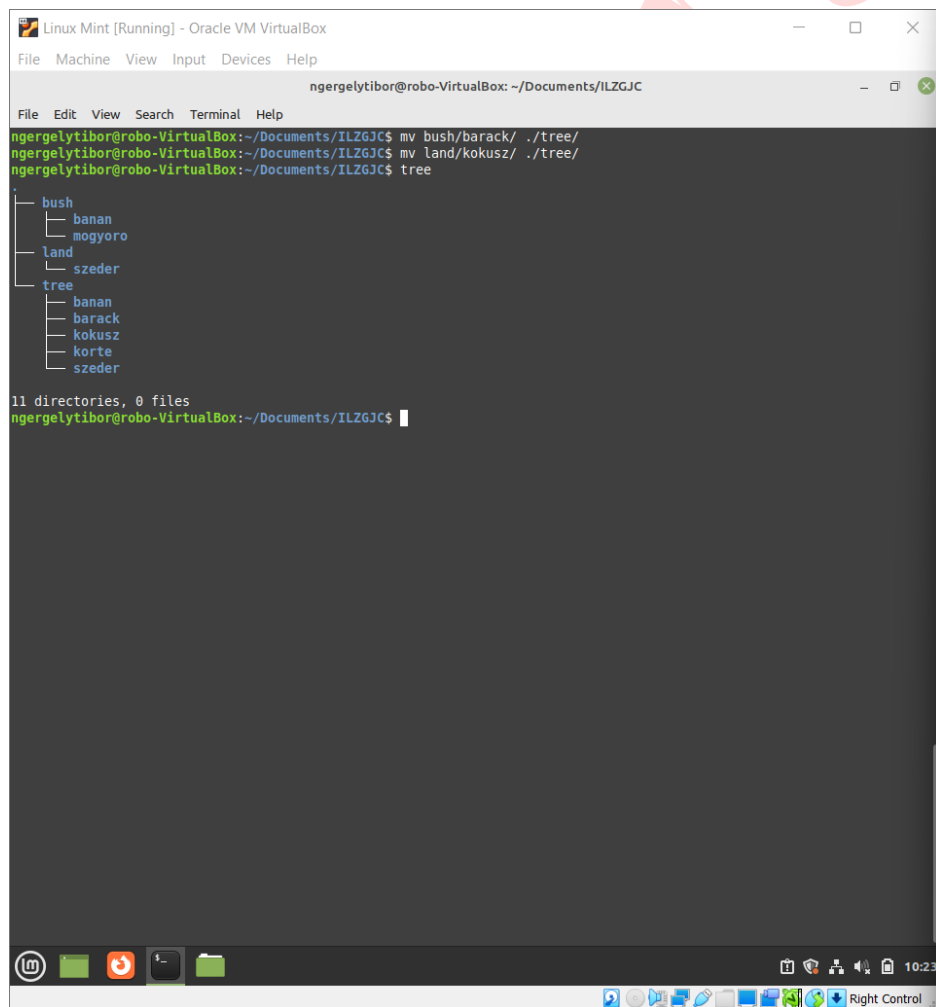
```
tree
├── bush
│   ├── banan
│   ├── barack
│   └── mogyoro
├── land
│   ├── kokusz
│   └── szeder
└── tree
    ├── banan
    ├── korte
    └── szeder
```

11 directories, 0 files
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC\$

3. feladat

Végezze el a következő áthelyezéseket:

- a neptunkod / bush /barack katalógust helyezze át a neptunkod /tree katalógusba
- a neptunkod /land /kokusz katalógust helyezze át a neptunkod/tree katalógusba



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

ngergelytiber@robo-VirtualBox: ~/Documents/ILZGJC
File Edit View Search Terminal Help

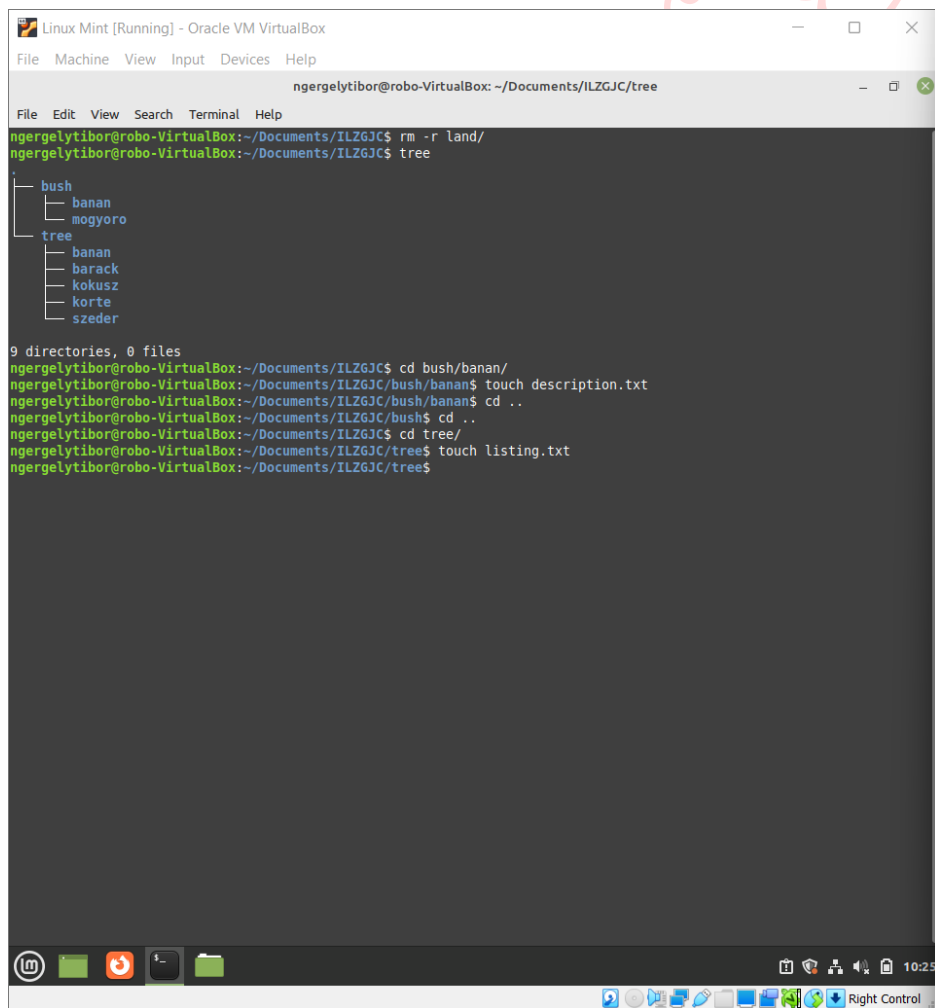
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$ mv bush/barack/ ./tree/
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$ mv land/kokusz/ ./tree/
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$ tree
.
├── bush
│   ├── banan
│   └── mogyoro
├── land
│   └── szeder
└── tree
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    └── szeder

11 directories, 0 files
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$
```

4. feladat

Törölje a neptunkod/land katalógust a teljes tartalmával. Hozza létre a következő szöveges állományokat:

- neptunkod/bush/banan/ description
- neptunkod/tree/listing



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC/tree
File Edit View Search Terminal Help

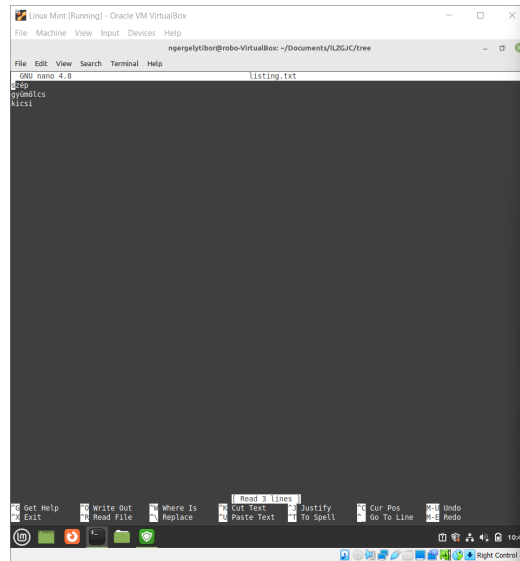
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ rm -r land/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ tree
.
├── bush
│   ├── banan
│   └── mogyoro
└── tree
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    └── szeder

9 directories, 0 files
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cd bush/banan/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush/banan$ touch description.txt
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush/banan$ cd ..
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush$ cd ..
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC$ cd tree/
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ touch listing.txt
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$
```

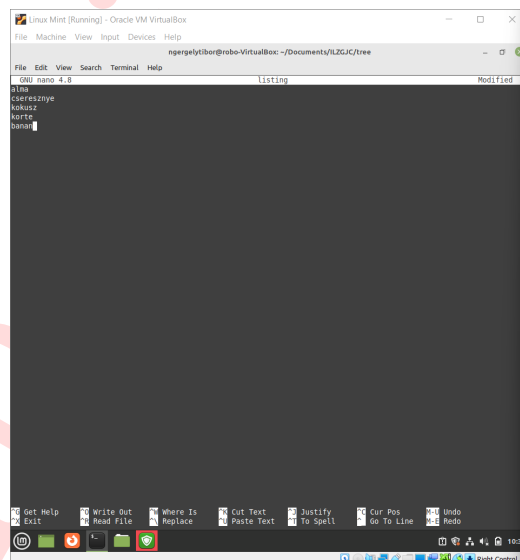
5. feladat

A description szöveges állományba írjon 3 sort a málnáról.

A listing szöveges állományba soroljon fel külön sorba 5 olyan gyümölcsöt, amelyek tree teremnek.



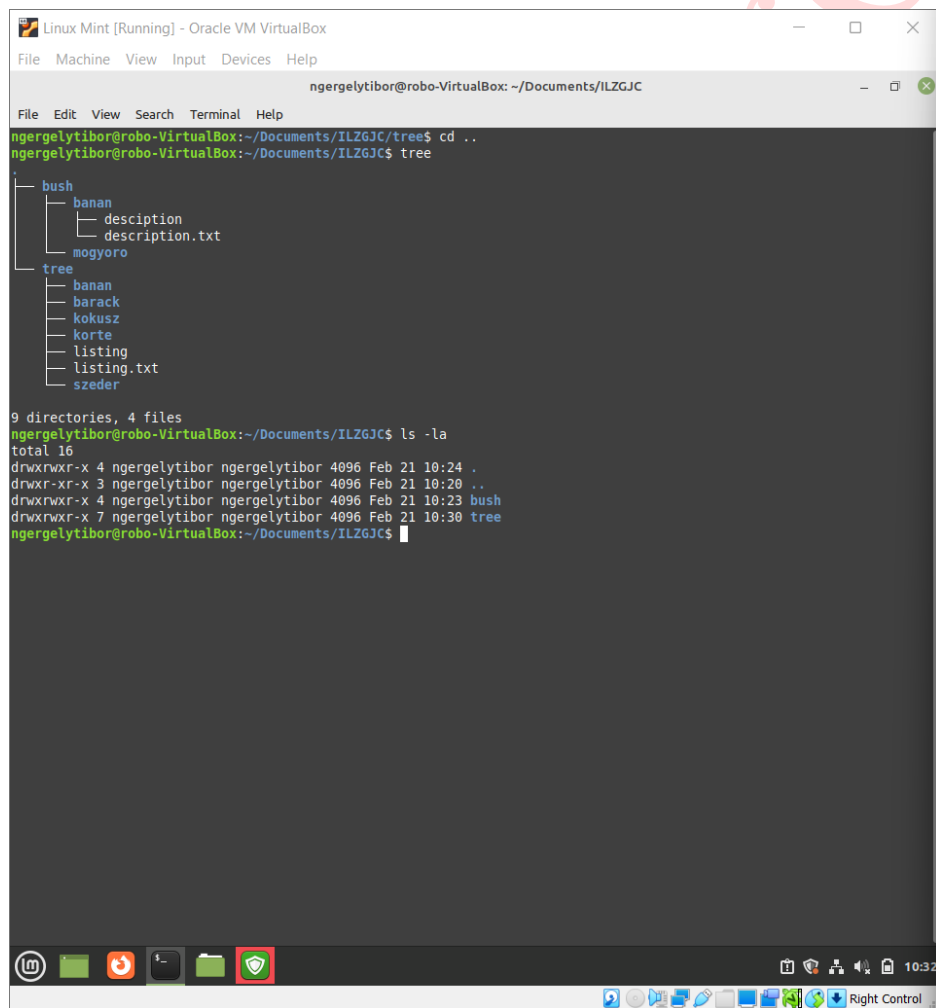
```
GNU nano 4.8 listing.txt
árpács
^
```



```
GNU nano 4.8 listing.txt
árpács
árpács
árpács
árpács
árpács
^
```

6. feladat

Listázza a neptunkod katalógus tartalmát úgy, hogy megjelenjen az alkatalógusok tartalma is. Ezután listázza az aktuális (munka)katalógus nevét.



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

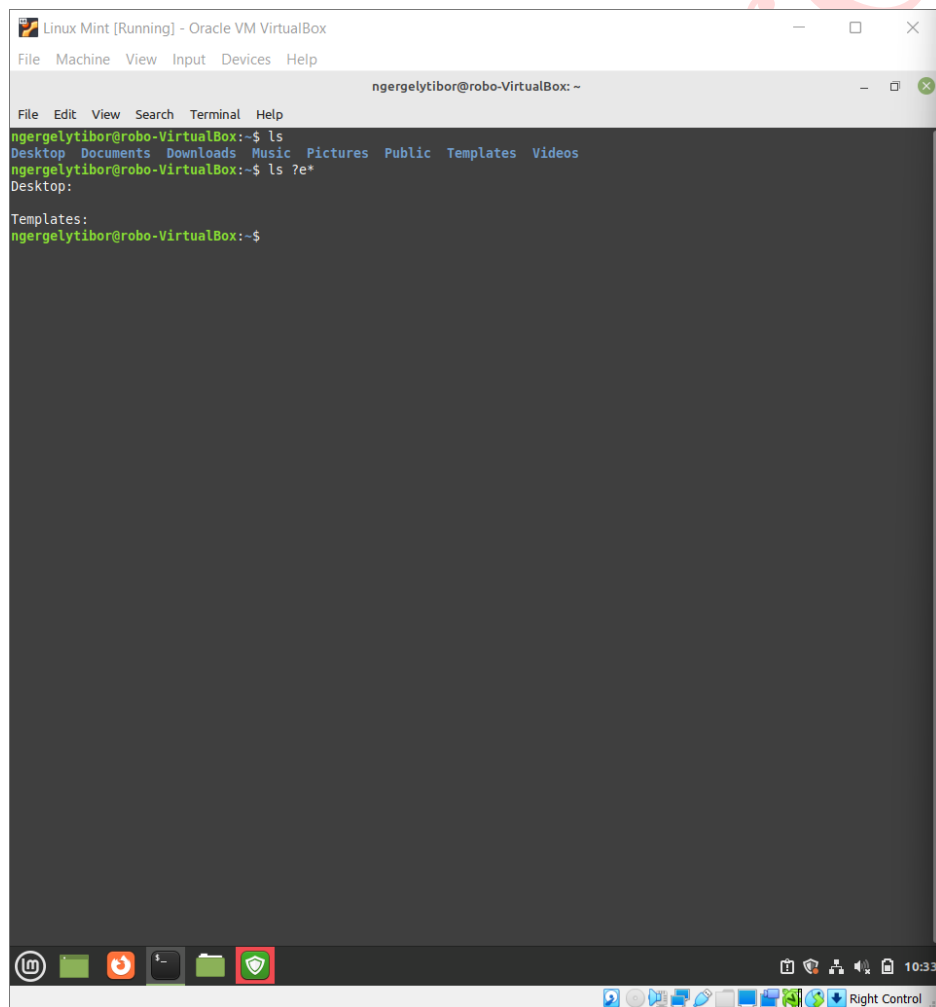
ngergelytiber@robo-VirtualBox: ~/Documents/ILZGJC
File Edit View Search Terminal Help

ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC/tree$ cd ..
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$ tree
.
├── bush
│   ├── banan
│   │   └── description
│   │       └── description.txt
│   └── mogyoro
└── tree
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    ├── listing
    ├── listing.txt
    └── szeder

9 directories, 4 files
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$ ls -la
total 16
drwxrwxr-x 4 ngergelytiber ngergelytiber 4096 Feb 21 10:24 .
drwxr-xr-x 3 ngergelytiber ngergelytiber 4096 Feb 21 10:20 ..
drwxrwxr-x 4 ngergelytiber ngergelytiber 4096 Feb 21 10:23 bush
drwxrwxr-x 7 ngergelytiber ngergelytiber 4096 Feb 21 10:30 tree
ngergelytiber@robo-VirtualBox:~/Documents/ILZGJC$
```


7. feladat

Térjen vissza a saját home katalógusába és keresse meg az összes olyan file-t, amelyek nevének második betűje e.



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

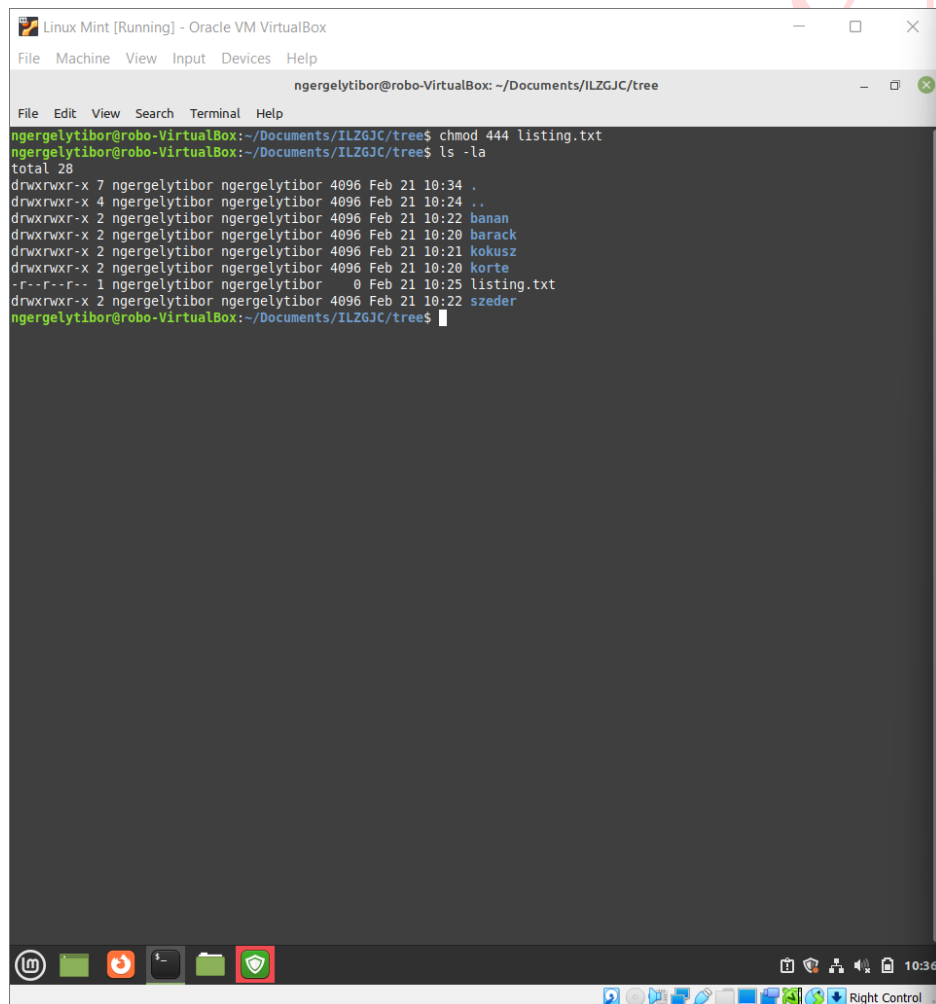
ngergelytibor@robo-VirtualBox: ~

File Edit View Search Terminal Help

ngergelytibor@robo-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
ngergelytibor@robo-VirtualBox:~$ ls ?e*
Desktop:
Templates:
ngergelytibor@robo-VirtualBox:~$
```

8. feladat

Tegye mindenki számára olvashatóvá a listing file-t.

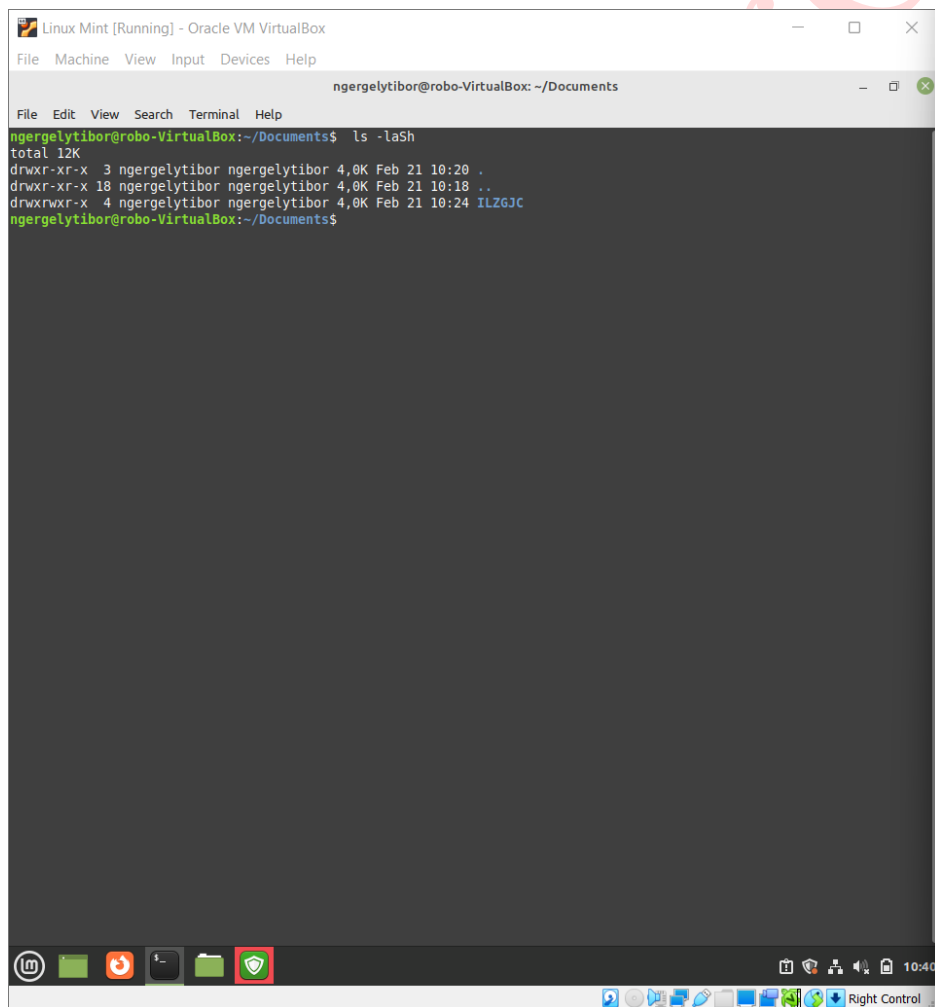


The screenshot shows a terminal window titled "Linux Mint [Running] - Oracle VM VirtualBox". The terminal prompt is "ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC/tree". The user has executed the command "chmod 444 listing.txt". The output of the command is displayed, showing the permissions for the file "listing.txt" as "-r--r--r--".

```
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ chmod 444 listing.txt
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ ls -la
total 28
drwxrwxr-x 7 ngergelytibor ngergelytibor 4096 Feb 21 10:34 .
drwxrwxr-x 4 ngergelytibor ngergelytibor 4096 Feb 21 10:24 ..
drwxrwxr-x 2 ngergelytibor ngergelytibor 4096 Feb 21 10:22 banan
drwxrwxr-x 2 ngergelytibor ngergelytibor 4096 Feb 21 10:20 barack
drwxrwxr-x 2 ngergelytibor ngergelytibor 4096 Feb 21 10:21 kokusz
drwxrwxr-x 2 ngergelytibor ngergelytibor 4096 Feb 21 10:20 korte
-r--r--r-- 1 ngergelytibor ngergelytibor  0 Feb 21 10:25 listing.txt
drwxrwxr-x 2 ngergelytibor ngergelytibor 4096 Feb 21 10:22 szeder
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$
```

9. feladat

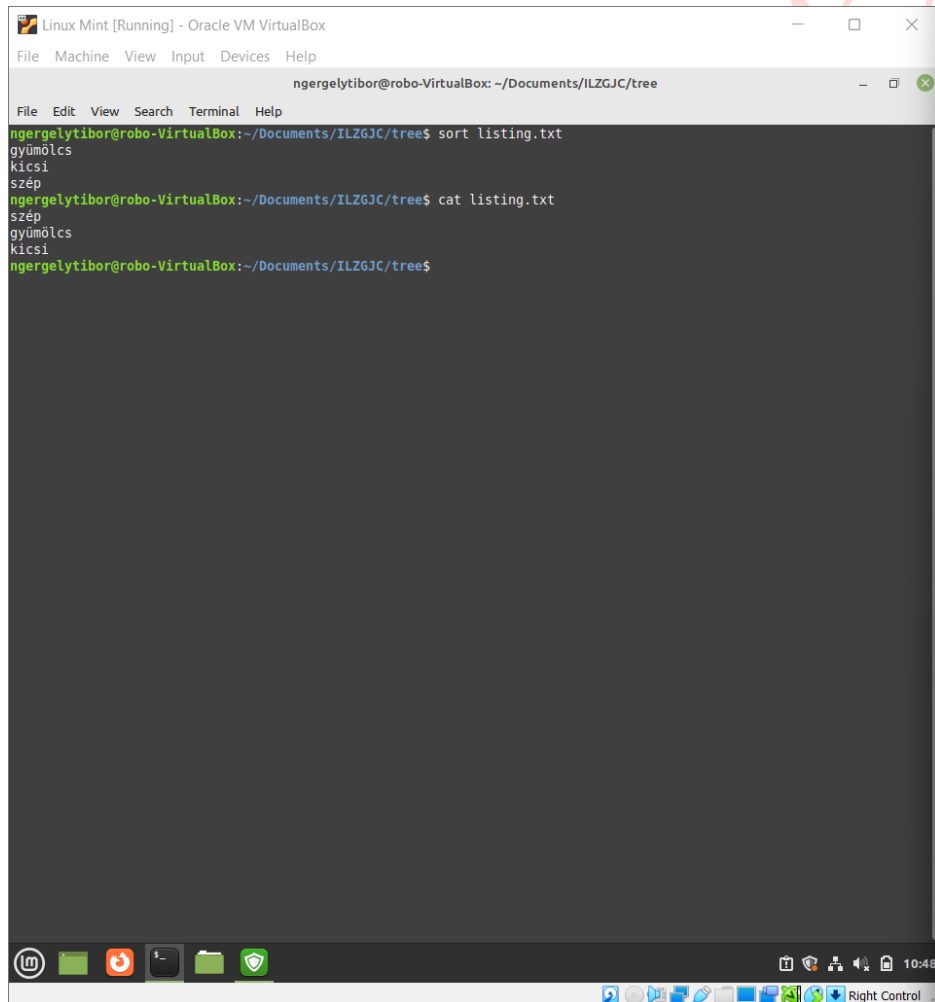
Listázza ki, hogy mennyi helyet foglal a merevlemezen a neptunkod katalógus az alkatalógusaival együtt. Az alkatalógusok méretei ne jelenjenek meg.



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
ngergelytiber@robo-VirtualBox: ~/Documents
File Edit View Search Terminal Help
ngergelytiber@robo-VirtualBox:~/Documents$ ls -laSh
total 12K
drwxr-xr-x  3 ngergelytiber ngergelytiber 4,0K Feb 21 10:20 .
drwxr-xr-x 18 ngergelytiber ngergelytiber 4,0K Feb 21 10:18 ..
drwxrwxr-x  4 ngergelytiber ngergelytiber 4,0K Feb 21 10:24 ILZGJC
ngergelytiber@robo-VirtualBox:~/Documents$
```

10. feladat

Listázza ABC-szerint rendezve a listing file tartalmát.

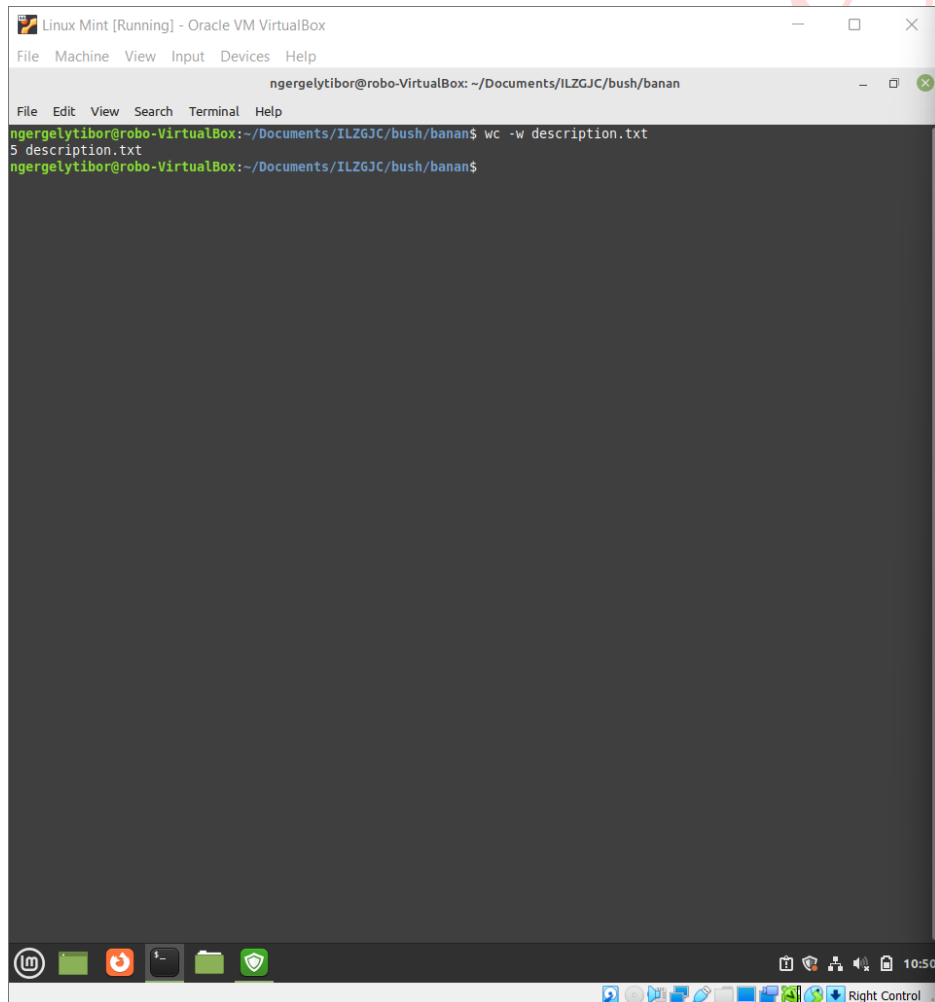


The screenshot shows a terminal window titled "Linux Mint [Running] - Oracle VM VirtualBox". The terminal prompt is "ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC/tree". The user enters the command "sort listing.txt", which outputs "gyümölcs", "kicsi", and "szép". Then, the user enters "cat listing.txt", which outputs "szép", "gyümölcs", and "kicsi". The terminal window has a menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The bottom of the window shows a taskbar with various icons and a system tray with a clock showing "10:48".

```
ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC/tree
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ sort listing.txt
gyümölcs
kicsi
szép
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$ cat listing.txt
szép
gyümölcs
kicsi
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/tree$
```

11. feladat

Számolja meg a description file-ban szereplő szavakat.



```
Linux Mint [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

ngergelytibor@robo-VirtualBox: ~/Documents/ILZGJC/bush/banan
File Edit View Search Terminal Help

ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush/banan$ wc -w description.txt
5 description.txt
ngergelytibor@robo-VirtualBox:~/Documents/ILZGJC/bush/banan$
```