

EPAM University Programs
DevOps external course
Module 4 Linux Essentials with Bash
TASK 4.4

4.4.1 Go (if necessary, create) to a folder in the home directory ... / tmp / dir1.

```
bobrov@bobrov-VirtualBox:~$ mkdir tmp
bobrov@bobrov-VirtualBox:~$ ls
Desktop  Downloads  file2  Pictures  Templates  Videos
Documents  file1      Music  Public    tmp
bobrov@bobrov-VirtualBox:~$ cd tmp
bobrov@bobrov-VirtualBox:~/tmp$ mkdir dir1
bobrov@bobrov-VirtualBox:~/tmp$ cd dir1
```

```
bobrov@bobrov-VirtualBox:~$ ls -l > file1
bobrov@bobrov-VirtualBox:~$ ls
Desktop  Documents  Downloads  file1  Music  Pictures  Public  Templates  Videos
bobrov@bobrov-VirtualBox:~$ cat file1
total 32
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Desktop
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Documents
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Downloads
-rw-rw-r-- 1 bobrov bobrov 0 κbi 14 22:48 file1
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Music
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Pictures
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Public
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Templates
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Videos
```

4.4.2 Create a file with any name. Redirect to it a long listing of the current directory. View the contents of the file (screenshot / textout with command).

4.4.3 Create a second file. It also redirects an extended listing of the current directory. There are two ways to compare these files. (screenshot with commands)

```
bobrov@bobrov-VirtualBox:~$ ls -l > file2
bobrov@bobrov-VirtualBox:~$ ls
Desktop  Documents  Downloads  file1  file2  Music  Pictures  Public  Templates  Videos
bobrov@bobrov-VirtualBox:~$ cmp file1 file2
file1 file2 differ: byte 8, line 1
bobrov@bobrov-VirtualBox:~$ diff file1 file2
1c1
< total 32
---
> total 36
5c5,6
< -rw-rw-r-- 1 bobrov bobrov 0 κbi 14 22:48 file1
---
> -rw-rw-r-- 1 bobrov bobrov 514 κbi 14 22:48 file1
> -rw-rw-r-- 1 bobrov bobrov 0 κbi 14 22:50 file2
```


4.4.5 Do the same with the second file in the nano editor.

```
GNU nano 2.9.3 file2 Modified
36 files
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Desktop
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Documents
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Downloads
-rw-rw-r-- 1 bobrov bobrov 514 κbi 14 22:48 file1
-rw-rw-r-- 1 bobrov bobrov 0 κbi 14 22:50 file2
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Music
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Pictures
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Public
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Templates
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Videos
End of File

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line
```

4.4.6 Create a variable containing the current directory ... / tmp / dir1 (from item 1). Go to the home directory using a special variable or metacharacter. Go back using a variable.

```
bobrov@bobrov-VirtualBox:~/tmp/dir1$ var1="$PWD"
bobrov@bobrov-VirtualBox:~/tmp/dir1$ echo $var1
/home/bobrov/tmp/dir1
bobrov@bobrov-VirtualBox:~/tmp/dir1$ cd
bobrov@bobrov-VirtualBox:~$ cd $var1
bobrov@bobrov-VirtualBox:~/tmp/dir1$
```

4.4.7 Create a command sequence that sequentially redirects the listing to a file from the home directory and, if successful, from the directory ... / tmp / dir1. Browse the contents of the file and make sure that there are both lists of directory files.

```
bobrov@bobrov-VirtualBox:~$ ls -l > file4 | ls -l $var1 >> file4
bobrov@bobrov-VirtualBox:~$ cat file4
total 36
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Desktop
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Documents
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Downloads
-rw-rw-r-- 1 bobrov bobrov 0 κbi 15 01:50 file4
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Music
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Pictures
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Public
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Templates
drwxrwxr-x 3 bobrov bobrov 4096 κbi 15 00:34 tmp
drwxr-xr-x 2 bobrov bobrov 4096 κbi 5 01:13 Videos
total 0
-rw-rw-r-- 1 bobrov bobrov 0 κbi 15 01:32 zerofile
bobrov@bobrov-VirtualBox:~$
```

4.4.8 Create one variable that will store your Last Name First Name. Create a complex command that displays the text “username first name last name” and the number of characters of the last name and first name individually.

```
var1="Dmytro Bobrov"
echo $(whoami;echo "$var1");echo $(echo "$var1"|cut -d " " -f1|tr -d '\n'|wc -m;echo "$var1"|cut -d " " -f2|tr -d '\n'|wc -m)
```

Output

```
bobrov Dmytro Bobrov
6 6
```

```
bobrov@bobrov-VirtualBox:~$ var1="Dmytro Bobrov"
bobrov@bobrov-VirtualBox:~$ echo "$var1"
Dmytro Bobrov
bobrov@bobrov-VirtualBox:~$ whoami
bobrov
bobrov@bobrov-VirtualBox:~$ echo $(whoami;echo "$var1");echo $(echo "$var1"|cut -d " " -f1|tr -d '\n'|wc -m;echo "$var1"|cut -d " " -f2|tr -d '\n'|wc -m)
bobrov Dmytro Bobrov
6 6
bobrov@bobrov-VirtualBox:~$
```

4.4.9 Print Last Name First name through a tab character using unprintable characters.

```
bobrov@bobrov-VirtualBox:~$ var1="Dmytro Bobrov"
bobrov@bobrov-VirtualBox:~$ echo $var1
Dmytro Bobrov
bobrov@bobrov-VirtualBox:~$ echo $var1 | tr " " "\t"
Dmytro  Bobrov
```

4.4.10 Create a variable and assign it an arbitrary value. Withdraw a phrase in the format "The value of the variable NAME is equal to VALUE" on the screen.

```
export DNIPRO="Chempion"  
echo $(echo "$DNIPRO";env|grep $DNIPRO)
```

```
bobrov@bobrov-VirtualBox:~$ export DNIPRO="Chempion"  
bobrov@bobrov-VirtualBox:~$ echo $(echo "$DNIPRO";env|grep $DNIPRO)  
Chempion DNIPRO=Chempion
```