

# Презентация Лабораторной работы №6

# Лабораторная работа 6

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# Цель работы:

ознакомиться с файловой системой Linux, её структурой, именами и содержанием каталогов. Приобрести практические навыки по применению команд для работы с файлами и каталогами, по управлению процессами (и работами), по проверке использования диска и обслуживанию файловой системы.

Ход работы:

```
danila@dsnovoseljcev:~$ touch abc1
danila@dsnovoseljcev:~$ cp abc1 april
danila@dsnovoseljcev:~$ cp acb1 may
cp: cannot stat 'acb1': No such file or directory
danila@dsnovoseljcev:~$ cp abc1 may
danila@dsnovoseljcev:~$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.
danila@dsnovoseljcev:~$ mkdir monthly
danila@dsnovoseljcev:~$ cp april may monthly
danila@dsnovoseljcev:~$ cp monthly/may monthly/june
danila@dsnovoseljcev:~$ ls monthly
april  june  may
danila@dsnovoseljcev:~$ mkdir monthly.00
danila@dsnovoseljcev:~$ cp -r monthly monthly.00
danila@dsnovoseljcev:~$ cp -r monthly.00 /tmp
```

```
danila@dsnovoseljcev:~$ mv april july
danila@dsnovoseljcev:~$ mv july monthly.00
danila@dsnovoseljcev:~$ ls monthly.00
july  monthly
danila@dsnovoseljcev:~$ mv monthly.00 monthly.01
danila@dsnovoseljcev:~$ mkdir reports
danila@dsnovoseljcev:~$ mv monthly.01 reports
danila@dsnovoseljcev:~$ mv reports/monthly.01 reports
```

```
danila@dsnovoseljcev:~$ touch may
danila@dsnovoseljcev:~$ chmod u+x may
danila@dsnovoseljcev:~$ ls -l may
-rwxrw-r-- 1 danila danila 0 abr 19 10:14 may
danila@dsnovoseljcev:~$ chmod u-x may
danila@dsnovoseljcev:~$ ls -l may
-rw-rw-r-- 1 danila danila 0 abr 19 10:14 may
danila@dsnovoseljcev:~$
```

```
danila@dsnovoseljcev:~$ chmod g-r monthly
danila@dsnovoseljcev:~$ chmod o-r monthly
danila@dsnovoseljcev:~$ touch abc1
danila@dsnovoseljcev:~$ chmod g+w abc1
```



```
danila@dsnovoseljcev:~$ df
```

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
udev	472608	0	472608	0%	/dev
tmpfs	100432	1376	99056	2%	/run
/dev/sda5	40503552	8995944	29420440	24%	/
tmpfs	502152	0	502152	0%	/dev/shm
tmpfs	5120	4	5116	1%	/run/lock
tmpfs	502152	0	502152	0%	/sys/fs/cgroup
/dev/loop3	66432	66432	0	100%	/snap/gtk-common-themes/1514
/dev/loop4	66688	66688	0	100%	/snap/gtk-common-themes/1515
/dev/loop1	224256	224256	0	100%	/snap/gnome-3-34-1804/66
/dev/loop5	52352	52352	0	100%	/snap/snap-store/518
/dev/loop7	32896	32896	0	100%	/snap/snapd/11841
/dev/sda1	523248	4	523244	1%	/boot/efi
tmpfs	100428	36	100392	1%	/run/user/1000

```
danila@dsnovoseljcev:~$ fsck
fsck from util-linux 2.34
e2fsck 1.45.5 (07-Jan-2020)
/dev/sda5 is mounted.
```

```
danila@dsnovoseljev:~$ cp /usr/include/xorg/isdv4.h /home/danila
danila@dsnovoseljev:~$ mv isdv4.h equipment
danila@dsnovoseljev:~$ mkdir ski.places
danila@dsnovoseljev:~$ mv equipment /ski.places
```

```
danila@dsnovoseljev:~$ mv equipment ~/ski.plases
danila@dsnovoseljev:~$ mv ski.plases/equipment ski.plases/equiplist
danila@dsnovoseljev:~$ cp abc1 ski.plases
danila@dsnovoseljev:~$ mv ski.plases/abc1 ski.plases/equiplist2
danila@dsnovoseljev:~$ cd ski.plases
```

```
danila@dsnovoseljev:~$ cd ski.plases
danila@dsnovoseljev:~/ski.plases$ mkdir equipment
danila@dsnovoseljev:~/ski.plases$ mv equiplist equiplist2 equipment
danila@dsnovoseljev:~/ski.plases$ cd
```

```
danila@dsnovoseljcev:~/ski.places$ cd  
danila@dsnovoseljcev:~$ mkdir newdir  
danila@dsnovoseljcev:~$ mv newdir ski.places  
danila@dsnovoseljcev:~$ cd ski.places
```



```
danila@dsnovoseljcev:~/ski.plases$ mkdir australia
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 12
drwxrwxr-x 2 danila danila 4096 abr 22 09:32 australia
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
danila@dsnovoseljcev:~/ski.plases$ chmod g-w australia
danila@dsnovoseljcev:~/ski.plases$ chmod g-x australia
danila@dsnovoseljcev:~/ski.plases$ chmod o-x australia
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 12
drwxr--r-- 2 danila danila 4096 abr 22 09:32 australia
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
```

```
danila@dsnovoseljcev:~/ski.plases$ mkdir play
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 12
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
drwxrwxr-x 2 danila danila 4096 abr 22 09:34 play
danila@dsnovoseljcev:~/ski.plases$ chmod g-r play
danila@dsnovoseljcev:~/ski.plases$ chmod g-w play
danila@dsnovoseljcev:~/ski.plases$ chmod o-r play
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 12
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
drwx--x--x 2 danila danila 4096 abr 22 09:34 play
```



```
danila@dsnovoseljcev:~/ski.plases$ touch my_os
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 8
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
-rw-rw-r-- 1 danila danila    0 abr 22 10:09 my_os
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
danila@dsnovoseljcev:~/ski.plases$ chmod u-w my_os
danila@dsnovoseljcev:~/ski.plases$ chmod u+x my_os
danila@dsnovoseljcev:~/ski.plases$ chmod g-w my_os
danila@dsnovoseljcev:~/ski.plases$ ls -l
total 8
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
-r-xr--r-- 1 danila danila    0 abr 22 10:09 my_os
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
```

```
danila@dsnovoseljcev:~/ski.plases$ touch feathers
```

```
danila@dsnovoseljcev:~/ski.plases$ ls -l
```

```
total 8
```

```
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 equipment
```

```
-rw-rw-r-- 1 danila danila 0 abr 22 10:11 feathers
```

```
drwxrwxr-x 2 danila danila 4096 abr 20 18:13 plans
```

emacs	modules
environment	modules-load.d
environment.d	ntab
ethertypes	ntools.conf
firefox	mysql
fonts	nanorc
fprintd.conf	netplan
fstab	network
fuse.conf	networkd-dispatcher
fwupd	NetworkManager
gai.conf	networks
gamemode.ini	newt
gdb	nsswitch.conf
gdm3	openvpn
geoclue	opt
ghostscript	os-release
glvnd	PackageKit
gnome	pam.conf
groff	pam.d
group	papersize
group-	passwd
grub.d	passwd-
gshadow	pcmcia
gshadow-	perl
gss	pki

```
danila@dsnovoseljcev:~$ cp feathers file.old  
danila@dsnovoseljcev:~$ mv file.old play
```

```
danila@dsnovoseljcev:~$ cp -r play fun
danila@dsnovoseljcev:~$ mv fun play
danila@dsnovoseljcev:~$ cd ~/play
danila@dsnovoseljcev:~/play$ mv fun games
```

```
danila@dsnovoseljcev:~$ chmod u-r feathers
danila@dsnovoseljcev:~$ cat feathers
cat: feathers: Permission denied
danila@dsnovoseljcev:~$ cp feathers play
cp: cannot open 'feathers' for reading: Permission denied
danila@dsnovoseljcev:~$ chmod u+r feathers
danila@dsnovoseljcev:~$ chmod u-x play
danila@dsnovoseljcev:~$ cd play
b:Help cd: play: Permission denied
danila@dsnovoseljcev:~$ chmod u+x play
```





## NAME

`mount` - mount a filesystem

## SYNOPSIS

`mount [-l|-h|-V]`

`Rhythmbox` `mount [-a [-fFnrsvw] [-t fstype] [-o optlist]`

`mount [-fnrsvw] [-o options] device|dir`

`mount [-fnrsvw] [-t fstype] [-o options] device dir`

## DESCRIPTION

All files accessible in a Unix system are arranged in one big tree, the file hierarchy, rooted at `/`. These files can be spread out over several devices. The `mount` command serves to attach the filesystem found on some device to the big file tree. Conversely, the `umount(8)`

**NAME**

**fsck** - check and repair a Linux filesystem

**SYNOPSIS**

**fsck** [-lsAVRTMNP] [-r [fd]] [-C [fd]] [-t fstype] [filesystem...] [--]  
[fs-specific-options]

**DESCRIPTION**

**fsck** is used to check and optionally repair one or more Linux filesystems. filesystem can be a device name (e.g. /dev/hdc1, /dev/sdb2), a mount point (e.g. /, /usr, /home), or an filesystem label or UUID specifier (e.g. UUID=8868abf6-88c5-4a83-98b8-bfc24057f7bd or LABEL=root). Normally, the **fsck** program will try to handle filesystems on different physical disk drives in parallel to reduce the total amount of time needed to check all of them.

If no filesystems are specified on the command line, and the **-A** option



**NAME**

`mkfs` - build a Linux filesystem

**SYNOPSIS**

`mkfs` [`options`] [`-t` `type`] [`fs-options`] `device` [`size`]

**DESCRIPTION**

This `mkfs` frontend is deprecated in favour of filesystem specific `mkfs.<type> utils`.

`mkfs` is used to build a Linux filesystem on a device, usually a hard disk partition. The `device` argument is either the device name (e.g. `/dev/hda1`, `/dev/sdb2`), or a regular file that shall contain the filesystem. The `size` argument is the number of blocks to be used for the filesystem.

The exit code returned by `mkfs` is 0 on success and 1 on failure.

KILL(1)

User Commands

KILL(1)

## NAME

kill - send a signal to a process

## SYNOPSIS

kill [options] <pid> [...]

## DESCRIPTION

The default signal for kill is TERM. Use -l or -L to list available signals. Particularly useful signals include HUP, INT, KILL, STOP, CONT, and 0. Alternate signals may be specified in three ways: -9, -SIGKILL or -KILL. Negative PID values may be used to choose whole process groups; see the PGID column in ps command output. A PID of -1 is special; it indicates all processes except the kill process itself and init.