

Цели и задачи работы

Цель лабораторной работы

Приобретение практических навыков взаимодействия пользователя с системой посредством командной строки.

Задачи лабораторной работы

- 1 Определить имя и путь домашнего каталога
- 2 Изучить команду ls.
- 3 Выполнить действия с каталогами.
- 4 Получить дополнительные сведения при помощи справки по командам.
- 5 Изучить команду history.

Процесс выполнения лабораторной работы

Имя и путь к домашнему каталогу

Опции команды ls

```
[keisaev@fedora tmp]$ ls -a
.
..
.font-unix
.ICE-unix
node-compile-cache
sddm-auth-9f2b84fa-18d8-4bf2-b4b3-00776416ae49
sddm--QyJuzx
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-abrted.service-UKBFGC
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-chronyd.service-cjLNyC
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-dbus-broker.service-Wmjrqn
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-irqbalance.service-55Cgix
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-ModemManager.service-ZvHUBq
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-polkit.service-9Fbh3f
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-rtkit-daemon.service-1612tb
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-logind.service-57kRgf
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-oemd.service-ngZuQf
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-resolved.service-UXMscI
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-upower.service-hgyHAC
.wget-hpkp_lck_1000
.wget-hsts_lck_1000
.X0-lock
.X11-unix
.XIM-unix
[keisaev@fedora tmp]$
```

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Опции команды ls

```
[keisaev@fedora tmp]$ ls -l
итого 0
drwxr-xr-x. 3 root root 60 сен 28 01:47 node-compile-cache
srwxr-xr-x. 1 root root 0 сен 28 01:12 sddm-auth-9f2b84fa-18d8-4bf2-b4b3-00776416ae49
srwx----- 1 sddm sddm 0 сен 28 01:12 sddm--QyJuzx
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-abrted.service-UKBFGC
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-chronyd.service-cjLNyC
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-dbus-broker.service-Wmjrqn
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-irqbalance.service-55Cgix
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-ModemManager.service-ZvHUBq
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-polkit.service-9Fbh3f
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-rtkit-daemon.service-1612tb
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-logind.service-57kRgf
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-oemd.service-ngZuQf
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-resolved.service-UXMscI
drwx----- 3 root root 60 сен 28 01:11 systemd-private-990e77e3a8c44be6a6a7167238f61c3d-upower.service-hgyHAC
[keisaev@fedora tmp]$
```

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Опции команды ls

```
[keisaev@fedora tmp]$ ls -f
.
..
.wget-hpkp_lck_1000
.wget-hsts_lck_1000
node-compile-cache
.X0-lock
sddm--QyJuzx
sddm-auth-9f2b84fa-18d8-4bf2-b4b3-00776416ae49
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-ModemManager.service-ZvHUBq
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-upower.service-hgyHAC
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-logind.service-57kRgf
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-rtkit-daemon.service-1612tb
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-polkit.service-9Fbh3f
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-chrond.service-cjLNyC
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-irqbalance.service-55Cgix
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-abrt.service-UKBFGC
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-dbus-broker.service-Wmjrqn
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-resolved.service-UXMscI
systemd-private-990e77e3a8c44be6a6a7167238f61c3d-systemd-oomd.service-ngZuQf
.font-unix
.XIM-unix
.ICE-unix
.X11-unix
```

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Опции команды ls

```
[keisaev@fedora tmp]$ cd /var/spool/
[keisaev@fedora spool]$ ls -l
итого 0
drwxr-x--x. 1 root abrt 60 сен 27 00:54 abrt
drwx-----. 1 abrt abrt 0 янв 16 2025 abrt-upload
drwxr-xr-x. 1 root root 66 апр 9 15:04 anacron
drwx-----. 1 root root 18 апр 9 15:05 at
drwx-----. 1 root root 0 янв 27 2025 cron
drwx--x---. 1 root lp 6 апр 9 15:05 cups
drwxr-xr-x. 1 root root 0 янв 16 2025 lpd
drwxrwxr-x. 1 root mail 14 сен 26 22:03 mail
drwxr-xr-x. 1 root root 0 мар 6 2025 plymouth
[keisaev@fedora spool]$
```

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height=70% }

Каталог /var/spool

```

keisaev@keisaev:/tmp$
keisaev@keisaev:/tmp$ cd /var/spool/
keisaev@keisaev:/var/spool$ ls -l
итого 0
drwxr-x--x. 1 root abrt 562 июн 11 11:28 abrt
drwx-----. 1 abrt abrt  0 ноя 20 2024 abrt-upload
drwx--x---. 1 root lp    6 янв  7 2025 cups
drwxr-xr-x. 1 root root  0 июл 17 2024 lpd
drwxrwxr-x. 1 root mail 760 сен  9 08:31 mail
drwxr-xr-x. 1 root root  0 сен 21 2024 plymouth
keisaev@keisaev:/var/spool$

```

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Домашний каталог

```

[keisaev@fedora ~]$ mkdir newdir
[keisaev@fedora ~]$ mkdir newdir/morefun
[keisaev@fedora ~]$ mkdir letters memos misk
[keisaev@fedora ~]$ ls
bin          git-extended  LICENSE      misk         work         Документы   Изображения  Общедоступные  Шаблоны
Downloads    letters      memos        newdir       Видео        Загрузки    Музыка       'Рабочий стол'
[keisaev@fedora ~]$ rm letters/ memos/ misk/
rm: невозможно удалить 'letters/': Это каталог
rm: невозможно удалить 'memos/': Это каталог
rm: невозможно удалить 'misk/': Это каталог
[keisaev@fedora ~]$ rm -r letters/ memos/ misk/
[keisaev@fedora ~]$ rm -r newdir/
[keisaev@fedora ~]$ ls
bin          git-extended  work         Документы   Изображения  Общедоступные  Шаблоны
Downloads    LICENSE      Видео        Загрузки    Музыка       'Рабочий стол'
[keisaev@fedora ~]$

```

{ #fig:007 width=70% height=70% }

Работа с каталогами


```
[keisaev@fedora ~]$ cd /tmp
[keisaev@fedora tmp]$ ls
node-compile-cache
sddm-auth-9f2b84fa-18d8-4bf2-b4b3-00776416ae49
sddm--QyJuzx
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-abrtd.service-UKBFGC
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-chronyd.service-cjLNyC
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-dbus-broker.service-WmjrqN
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-irqbalance.service-55Cgix
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-ModemManager.service-ZvHUBq
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-polkit.service-9Fbh3f
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-rtkit-daemon.service-1612tb
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-systemd-logind.service-57kRgf
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-systemd-oomd.service-ngZuQf
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-systemd-resolved.service-UXMscI
systemd-private-998e77e3a8c44be6a6a7167238f61c3d-upower.service-hgyHAC
[keisaev@fedora tmp]$ █
```

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Опции команды ls

```
'./work/study/2024-2025/Операционные системы/os-intro/template/report/report/_resources':
csl

'./work/study/2024-2025/Операционные системы/os-intro/template/report/report/_resources/csl':
gost-r-7-0-5-2008-numeric.csl

'./work/study/2024-2025/Операционные системы/os-intro/template/report/scripts':
image-report mpv-shot

:
./Видео:

./Документы:

./Загрузки:

./Изображения:

./Музыка:

./Общедоступные:

'./Рабочий стол':

:
./Шаблоны:
[keisaev@fedora ~]$ ls -t
Downloads  bin          work  Документы  Изображения  Общедоступные  Шаблоны
LICENSE    git-extended Видео  Загрузки   Музыка       'Рабочий стол'
[keisaev@fedora ~]$
```

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Справка по командам

```
[keisaev@fedora ~]$ help cd
cd: cd [-L|[-P [-e]] [-@]] [каталог]
Change the shell working directory.
```

Change the current directory to DIR. The default DIR is the value of the HOME shell variable. If DIR is "-", it is converted to \$OLDPWD.

The variable CDPATH defines the search path for the directory containing DIR. Alternative directory names in CDPATH are separated by a colon (:). A null directory name is the same as the current directory. If DIR begins with a slash (/), then CDPATH is not used.

If the directory is not found, and the shell option 'cdable_vars' is set, the word is assumed to be a variable name. If that variable has a value, its value is used for DIR.

Options:

- L force symbolic links to be followed: resolve symbolic links in DIR after processing instances of '..'
- P use the physical directory structure without following symbolic links: resolve symbolic links in DIR before processing instances of '..'
- e if the -P option is supplied, and the current working directory cannot be determined successfully, exit with a non-zero status
- @ on systems that support it, present a file with extended attributes as a directory containing the file attributes

The default is to follow symbolic links, as if '-L' were specified. '..' is processed by removing the immediately previous pathname component back to a slash or the beginning of DIR.

Exit Status:

Returns 0 if the directory is changed, and if \$PWD is set successfully when -P is used: non-zero otherwise.

```
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```

Справка по командам

```
foot
PWD(1) User Commands PWD(1)

NAME
    pwd - print name of current/working directory

SYNOPSIS
    pwd [OPTION]...

DESCRIPTION
    Print the full filename of the current working directory.

    -L, --logical
        use PWD from environment, even if it contains symlinks

    -P, --physical
        resolve all symlinks

    --help display this help and exit

    --version
        output version information and exit

    If no option is specified, -P is assumed.

    Your shell may have its own version of pwd, which usually supersedes the version described here. Please refer to your shell's documentation for details about the options it supports.

AUTHOR
    Written by Jim Meyering.

REPORTING BUGS
    GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
    Report any translation bugs to <https://translationproject.org/team/>

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SEE ALSO
    Manual page pwd(1) line 1 (press h for help or q to quit)
```

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Справка по командам

NAME

mkdir - make directories

SYNOPSIS

mkdir [OPTION]... DIRECTORY...

DESCRIPTION

Create the DIRECTORY(ies), if they do not already exist.

Mandatory arguments to long options are mandatory for short options too.

-m, --mode=MODE

set file mode (as in chmod), not a=rwx - umask

-p, --parents

no error if existing, make parent directories as needed, with their file modes unaffected by any -

-v, --verbose

print a message for each created directory

-Z

set SELinux security context of each created directory to the default type

--context[=CTX]

like -Z, or if CTX is specified then set the SELinux or SMACK security context to CTX

--help display this help and exit

--version

output version information and exit

AUTHOR

Written by David MacKenzie.

REPORTING BUGS

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>

Report any translation bugs to <<https://translationproject.org/team/>>

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Manual page mkdir(1) line 1 (press h for help or q to quit)

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Справка по командам

RMDIR(1)

User Commands

NAME

`rmdir` - remove empty directories

SYNOPSIS

`rmdir` [*OPTION*]... *DIRECTORY*...

DESCRIPTION

Remove the *DIRECTORY*(ies), if they are empty.

--ignore-fail-on-non-empty

ignore each failure to remove a non-empty directory

-p, --parents

remove *DIRECTORY* and its ancestors; e.g., '`rmdir -p a/b`' is similar to '`rmdir a/b a`'

-v, --verbose

output a diagnostic for every directory processed

--help

display this help and exit

--version

output version information and exit

AUTHOR

Written by David MacKenzie.

REPORTING BUGS

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>

Report any translation bugs to <<https://translationproject.org/team/>>

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SEE ALSO

`rmdir`(2)



Manual page `rmdir`(1) line 1 (press h for help or q to quit)

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Справка по командам

```
RM(1)                                User Commands                                RM(1)

NAME
  rm - remove files or directories

SYNOPSIS
  rm [OPTION]... [FILE]...

DESCRIPTION
  This manual page documents the GNU version of rm.  rm removes each specified file.  By default, it does not remove directories.

  If the -I or --interactive=once option is given, and there are more than three files or the -r, -R, or --recursive are given, then rm prompts the user for whether to proceed with the entire operation.  If the response is not affirmative, the entire command is aborted.

  Otherwise, if a file is unwritable, standard input is a terminal, and the -f or --force option is not given, or the -i or --interactive=always option is given, rm prompts the user for whether to remove the file.  If the response is not affirmative, the file is skipped.

OPTIONS
  Remove (unlink) the FILE(s).

  -f, --force
    ignore nonexistent files and arguments, never prompt

  -i
    prompt before every removal

  -I
    prompt once before removing more than three files, or when removing recursively; less intrusive than -i, while still giving protection against most mistakes

  --interactive[=WHEN]
    prompt according to WHEN: never, once (-I), or always (-i); without WHEN, prompt always

  --one-file-system
    when removing a hierarchy recursively, skip any directory that is on a file system different from that of the corresponding command line argument

  --no-preserve-root
    do not treat '/' specially

Manual page rm(1) line 1 (press h for help or q to quit)
```

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История командной строки

```
198 gh repo create dotfiles --template="yamadharma/dotfiles-template" --private
199 chezmoi init git@github.com:DeckRim/dotfiles.git
200 chezmoi diff
201 chezmoi apply -v
202 chezmoi update
203 chezmoi git pull -- --autostash --rebase && chezmoi diff
204 chezmoi apply
205 nano ~/.config/chezmoi/chezmoi.toml
206 killall foot
207 killall Thunar
208 killall keisaev - Thunar
209 cd
210 pwd
211 cd /tmp
212 cd /tmp
213 ls
214 ls -a
215 ls -l
216 ls -f
217 cd /var/spool/
218 ls -l
219 cd
220 ls
221 ls -al
222 mkdir newdir
223 mkdir newdir/morefun
224 mkdir letters memos misk
225 ls
226 rm letters/ memos/ misk/
227 rm -r letters/ memos/ misk/
228 rm -r newdir/
229 ls
230 ls -R
231 ls -t
232 help cd
233 man pwd
234 man mkdir
235 man rmdir
236 man rm
237 history
[keisaev@fedora ~]$
```

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Выводы по проделанной работе

Вывод

Мы приобрели практические навыки взаимодействия пользователя с системой посредством командной строки.