

Отчет по лабораторной работе №4

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ОТЧЕТ ПО ЛАБОРАТОРНОЙ РАБОТЕ №4

Цель работы и задание

Цель данной лабораторной работы - приобретение практических навыков взаимодействия пользователя с системой посредством командной строки. Задание: 1. Определите полное имя вашего домашнего каталога. Далее относительно этого каталога будут выполняться последующие упражнения. 2. Выполните следующие действия: 1. Перейдите в каталог /tmp. 2. Выведите на экран содержимое каталога /tmp. Для этого используйте команду ls с

Ход работы

**Определение имени домашнего каталога и
переход в /tmp**

```
[eaalmazova@fedora ~]$ pwd
/home/eaalmazova
[eaalmazova@fedora ~]$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  work
[eaalmazova@fedora ~]$ cd /
[eaalmazova@fedora /]$ ls
bin  boot  dev  etc  home  lib  lib64  lost+found  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
[eaalmazova@fedora /]$ /tmp
bash: /tmp: Is a directory
[eaalmazova@fedora /]$ cd /tmp
```

Рисунок 1 - Полное имя домашнего каталога и переход в /tmp

Вывод содержимого каталога /tmp

Команда `ls` вывела список имен видимых файлов и подкаталогов, `ls -a` вывела имена видимых и скрытых файлов и подкаталогов, `ls -al` вывела список имен видимых и скрытых файлов и каталогов, а для символических ссылок отобразило информацию о файле, на который они ссылаются, `ls -al` вывела список видимых и скрытых файлов и каталогов, а также подробную информацию о них (подробнее см. в теоретическом введении). `ls`

```
[eaalmazova@fedora tmp]$ ls
systemd-private-1168dd2e6dbc45bb845acdac3c746286-chrond.service-2bfd8N
systemd-private-1168dd2e6dbc45bb845acdac3c746286-colord.service-ubroK
systemd-private-1168dd2e6dbc45bb845acdac3c746286-dbus-broker.service-eWqj1F
systemd-private-1168dd2e6dbc45bb845acdac3c746286-fwupd.service-Wo5UP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-geoclue.service-Rsh3cP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-low-memory-monitor.service-Rd5e2O
systemd-private-1168dd2e6dbc45bb845acdac3c746286-ModemManager.service-Ar3Gvk
systemd-private-1168dd2e6dbc45bb845acdac3c746286-power-profiles-daemon.service-aLE7Z6
systemd-private-1168dd2e6dbc45bb845acdac3c746286-rtkit-daemon.service-RnrM0x
systemd-private-1168dd2e6dbc45bb845acdac3c746286-switcheroo-control.service-yj0bir
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-logind.service-WEU03g
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-nmnd.service-xWQo51
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-resolved.service-EJ2oe2
systemd-private-1168dd2e6dbc45bb845acdac3c746286-upower.service-YEp96V
[eaalmazova@fedora tmp]$ ls -a
.
font-unix
ICE-unix
systemd-private-1168dd2e6dbc45bb845acdac3c746286-chrond.service-2bfd8N
systemd-private-1168dd2e6dbc45bb845acdac3c746286-colord.service-ubroK
systemd-private-1168dd2e6dbc45bb845acdac3c746286-dbus-broker.service-eWqj1F
systemd-private-1168dd2e6dbc45bb845acdac3c746286-fwupd.service-Wo5UP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-geoclue.service-Rsh3cP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-low-memory-monitor.service-Rd5e2O
systemd-private-1168dd2e6dbc45bb845acdac3c746286-ModemManager.service-Ar3Gvk
systemd-private-1168dd2e6dbc45bb845acdac3c746286-power-profiles-daemon.service-aLE7Z6
systemd-private-1168dd2e6dbc45bb845acdac3c746286-rtkit-daemon.service-RnrM0x
systemd-private-1168dd2e6dbc45bb845acdac3c746286-switcheroo-control.service-yj0bir
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-logind.service-WEU03g
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-nmnd.service-xWQo51
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-resolved.service-EJ2oe2
systemd-private-1168dd2e6dbc45bb845acdac3c746286-upower.service-YEp96V
Test-unix
.X0-lock
.X1021-lock
.X1025-lock
.X11-unix
.X1-lock
.XIM-unix
[eaalmazova@fedora tmp]$ ls -al
.
font-unix
ICE-unix
systemd-private-1168dd2e6dbc45bb845acdac3c746286-chrond.service-2bfd8N
systemd-private-1168dd2e6dbc45bb845acdac3c746286-colord.service-ubroK
systemd-private-1168dd2e6dbc45bb845acdac3c746286-dbus-broker.service-eWqj1F
systemd-private-1168dd2e6dbc45bb845acdac3c746286-fwupd.service-Wo5UP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-geoclue.service-Rsh3cP
systemd-private-1168dd2e6dbc45bb845acdac3c746286-low-memory-monitor.service-Rd5e2O
systemd-private-1168dd2e6dbc45bb845acdac3c746286-ModemManager.service-Ar3Gvk
systemd-private-1168dd2e6dbc45bb845acdac3c746286-power-profiles-daemon.service-aLE7Z6
systemd-private-1168dd2e6dbc45bb845acdac3c746286-rtkit-daemon.service-RnrM0x
systemd-private-1168dd2e6dbc45bb845acdac3c746286-switcheroo-control.service-yj0bir
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-logind.service-WEU03g
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-nmnd.service-xWQo51
systemd-private-1168dd2e6dbc45bb845acdac3c746286-systemd-resolved.service-EJ2oe2
systemd-private-1168dd2e6dbc45bb845acdac3c746286-upower.service-YEp96V
Test-unix
.X0-lock
```

Рисунок 2 - Вывод команд ls, ls-a, ls -al

```

.X1024-lock
.X1025-lock
.X11-unix
.X1-lock
.X11-unix
[eaalmazova@fedora tmp]$ ls -al
total 16
drwxrwxrwt. 21 root    root    500 Apr 29 23:03 .
dr-xr-xr-x.  1 root    root    152 Oct 26 2021 ../
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .font-unix
drwxrwxrwt.  2 root    root    80 Apr 29 23:02 .ICE-unix
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-chronyd.service-2bfd8H
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-coldr.service-u8r0K
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-dbus-broker.service-wqj1f
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-fuupd.service-Ws98P
drwx-----.  3 root    root    60 Apr 29 23:04 systemd-private-1168dd2e6dbc45bb845acd3c746286-geoclue.service-Rsh3cP
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-low-memory-monitor.service-Rd5e20
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-ModemManager.service-Ar3Gvk
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-power-profiles-daemon.service-aLE7Z6
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-rtkit-daemon.service-Rnm0x
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-switcheroo-control.service-yj8b1r
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-logind.service-MEUV3g/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-oomd.service-XRQo5/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-resolved.service-E3zoe2/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-upower.service-YEp96V
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .Test-unix
-r--r--r--.  1 eaalmazova eaalmazova 11 Apr 29 23:02 .X0-lock
-r--r--r--.  1 gdm        gdm        11 Apr 29 23:04 .X1024-lock
-r--r--r--.  1 gdm        gdm        11 Apr 29 23:04 .X1025-lock
drwxrwxrwt.  2 root    root    120 Apr 29 23:02 .X11-unix
-r--r--r--.  1 eaalmazova eaalmazova 11 Apr 29 23:02 .X1-lock
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .X11-unix
[eaalmazova@fedora tmp]$ ls -alF
total 16
drwxrwxrwt. 21 root    root    500 Apr 29 23:03 ./
dr-xr-xr-x.  1 root    root    152 Oct 26 2021 ../
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .font-unix/
drwxrwxrwt.  2 root    root    80 Apr 29 23:02 .ICE-unix/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-chronyd.service-2bfd8H/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-coldr.service-u8r0K/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-dbus-broker.service-wqj1f/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-fuupd.service-Ws98P/
drwx-----.  3 root    root    60 Apr 29 23:04 systemd-private-1168dd2e6dbc45bb845acd3c746286-geoclue.service-Rsh3cP/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-low-memory-monitor.service-Rd5e20/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-ModemManager.service-Ar3Gvk/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-power-profiles-daemon.service-aLE7Z6/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-rtkit-daemon.service-Rnm0x/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-switcheroo-control.service-yj8b1r/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-logind.service-MEUV3g/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-oomd.service-XRQo5/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-systemd-resolved.service-E3zoe2/
drwx-----.  3 root    root    60 Apr 29 23:03 systemd-private-1168dd2e6dbc45bb845acd3c746286-upower.service-YEp96V/
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .Test-unix/
-r--r--r--.  1 eaalmazova eaalmazova 11 Apr 29 23:02 .X0-lock
-r--r--r--.  1 gdm        gdm        11 Apr 29 23:04 .X1024-lock
-r--r--r--.  1 gdm        gdm        11 Apr 29 23:04 .X1025-lock
drwxrwxrwt.  2 root    root    120 Apr 29 23:02 .X11-unix/
-r--r--r--.  1 eaalmazova eaalmazova 11 Apr 29 23:02 .X1-lock
drwxrwxrwt.  2 root    root    40 Apr 29 23:03 .X11-unix/

```

Рисунок 3 - Вывод команд ls -al (продолжение), ls -al, ls -alF

**Поиск подкаталога cron и определение
владельца файлов домашнего каталога**

```

[eaalmazova@fedora tmp]$ cd /
[eaalmazova@fedora /]$ ls
bin boot dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[eaalmazova@fedora /]$ cd var/spool
[eaalmazova@fedora spool]$ ls
abrt abrt-upload cups lpd mail plymouth
[eaalmazova@fedora spool]$ ls -F
abrt/ abrt-upload/ cups/ lpd/ mail/ plymouth/
[eaalmazova@fedora spool]$ cd ~
[eaalmazova@fedora ~]$ ls -aLF
total 40
drwx-----, 1 eaalmazova eaalmazova 570 Apr 29 23:03 ./
drwxr-xr-x, 1 root root 20 Apr 22 15:45 ../
-rw-----, 1 eaalmazova eaalmazova 3769 Apr 29 23:09 .bash_history
-rw-r--r--, 1 eaalmazova eaalmazova 18 Jul 21 2021 .bash_logout
-rw-r--r--, 1 eaalmazova eaalmazova 141 Jul 21 2021 .bash_profile
-rw-r--r--, 1 eaalmazova eaalmazova 492 Jul 21 2021 .bashrc
drwx-----, 1 eaalmazova eaalmazova 348 Apr 29 19:20 .cache/
drwxr-xr-x, 1 eaalmazova eaalmazova 240 Apr 29 19:20 .config/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Desktop/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Documents/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 29 19:07 Downloads/
-rw-rw-r--, 1 eaalmazova eaalmazova 239 Apr 22 16:30 .gitconfig
drwx-----, 1 eaalmazova eaalmazova 134 Apr 29 20:55 .gnupg/
drwx-----, 1 eaalmazova eaalmazova 20 Apr 22 15:45 .local/
drwxr-xr-x, 1 eaalmazova eaalmazova 48 Apr 22 16:10 .mozilla/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Music/
drwxr-xr-x, 1 eaalmazova eaalmazova 234 Apr 22 23:35 Pictures/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Public/
drwx-----, 1 eaalmazova eaalmazova 22 Apr 22 16:34 .ssh/
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Templates/
drwxrwxr-x, 1 eaalmazova eaalmazova 18 Apr 29 19:33 .texlive2021/
-rw-r-----, 1 eaalmazova eaalmazova 5 Apr 29 23:03 .vboxclient-clipboard.pid
-rw-r-----, 1 eaalmazova eaalmazova 5 Apr 29 23:03 .vboxclient-display-svga-x11.pid
-rw-r-----, 1 eaalmazova eaalmazova 5 Apr 29 23:03 .vboxclient-draganddrop.pid
-rw-r-----, 1 eaalmazova eaalmazova 5 Apr 29 23:03 .vboxclient-seamless.pid
drwxr-xr-x, 1 eaalmazova eaalmazova 0 Apr 22 15:45 Videos/
-rw-rw-r--, 1 eaalmazova eaalmazova 180 Apr 22 16:15 .wget-hsts
drwxrwxr-x, 1 eaalmazova eaalmazova 10 Apr 22 16:32 work/
[eaalmazova@fedora ~]$

```

Рисунок 4 - Содержимое /var/spool и ~

Создание и удаление каталогов

Я создала с помощью команды `mkdir` каталог `newdir` и его подкаталог `morefun`, а также создала (`mkdir`) и удалила 3 каталога: (`rmdir`) `letters`, `memos`, `misk`.

```
[eaalmazova@fedora ~]$ mkdir newdir
[eaalmazova@fedora ~]$ ls
Desktop Documents Downloads Music newdir Pictures Public Templates Videos work
[eaalmazova@fedora ~]$ cd newdir
[eaalmazova@fedora newdir]$ mkdir morefun
[eaalmazova@fedora newdir]$ ls
morefun
[eaalmazova@fedora newdir]$ cd ~
[eaalmazova@fedora ~]$ mkdir letters memos misk
[eaalmazova@fedora ~]$ ls
Desktop Documents Downloads letters memos misk Music newdir Pictures Public Templates Videos work
[eaalmazova@fedora ~]$ rmdir letters memos misk
[eaalmazova@fedora ~]$ ls
Desktop Documents Downloads Music newdir Pictures Public Templates Videos work
[eaalmazova@fedora ~]$ rm newdir
rm: cannot remove 'newdir': Is a directory
[eaalmazova@fedora ~]$ rmdir newdir/morefun
[eaalmazova@fedora ~]$ ls newdir
[eaalmazova@fedora ~]$ cd newdir
[eaalmazova@fedora newdir]$ ls
[eaalmazova@fedora newdir]$ cd ~
[eaalmazova@fedora ~]$ rm -r newdir
[eaalmazova@fedora ~]$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos work
```

Рисунок 5 - Создание и удаление каталогов

Получение справки по команде ls

Man ls показало: опция R покажет содержимое подкаталогов, набор опция -clt отсортирует файлы по времени последнего изменения и выведет подробное описание.

```
-l      use a long listing format

-L, --dereference
        when showing file information for a symbolic link, show information for the file the link references rather than for the link itself

-m      fill width with a comma separated list of entries

-n, --numeric-uid-gid
        like -l, but list numeric user and group IDs

-N, --literal
        print entry names without quoting

-o      like -l, but do not list group information

-p, --indicator-style=slash
        append / indicator to directories

-q, --hide-control-chars
        print ? instead of nongraphic characters

--show-control-chars
        show nongraphic characters as-is (the default, unless program is 'ls' and output is a terminal)

-Q, --quote-name
        enclose entry names in double quotes

--quoting-style=WORD
        use quoting style WORD for entry names: literal, locale, shell, shell-always, shell-escape, shell-escape-always, c, escape (overrides QUOTING_STYLE environment variable)

-r, --reverse
        reverse order while sorting

-R, --recursive
        list subdirectories recursively

-s, --size
        print the allocated size of each file, in blocks

-S      sort by file size, largest first
```

Рисунок 6 - Справка о команде ls (включает опцию R)

```

-c      with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and sort by name; otherwise:
        sort by ctime, newest first

-C      list entries by columns

--color[=WHEN]
        colorize the output; WHEN can be 'always' (default if omitted), 'auto', or 'never'; more info below

-d, --directory
        list directories themselves, not their contents

-D, --dired
        generate output designed for Emacs' dired mode

-f      do not sort, enable -aU, disable -ls --color

-F, --classify
        append indicator (one of +/=/@|) to entries

--file-type
        likewise, except do not append '*'

--format=WORD
        across -x, commas -m, horizontal -x, long -l, single-column -l, verbose -l, vertical -c

--full-time
        like -l --time-style=full-iso

-g      like -l, but do not list owner

--group-directories-first
        group directories before files;

        can be augmented with a --sort option, but any use of --sort=none (-U) disables grouping

-G, --no-group
        in a long listing, don't print group names

-h, --human-readable
        with -l and -s, print sizes like 1K 234M 2G etc.

--si    likewise, but use powers of 1000 not 1024

-H, --dereference-command-line
        follow symbolic links listed on the command line

--dereference-command-line-symlink-to-dir
        follow each command line symbolic link

        that points to a directory

--hide=PATTERN
        do not list implied entries matching shell PATTERN (overridden by -a or -A)

```

Рисунок 7 - Справка о команде ls (с опцией c, а точнее clt и cl, а также --hide)

```
-l    use a long listing format
```

Рисунок 8 - Справка о команде ls (с опцией l)


```
-a, --all  
do not ignore entries starting with .
```

Рисунок 9 - Справка о команде ls (с опцией a)

Получение справки по основным командам

С помощью команды `man` я просмотрела описание следующих команд: `cd` (рис.10), `pwd` (рис.11), `mkdir` (рис.12), `rmdir` (рис.13), `rm` (рис.14) (рис.15).

```
cd [-L][-P [-e]] [-@] [dir]
```

Change the current directory to dir. If dir is not supplied, the value of the **HOME** shell variable is the default. Any additional arguments following dir are ignored. The variable **CDPATH** defines the search path for the directory containing dir: each directory name in **CDPATH** is searched for dir. Alternative directory names in **CDPATH** are separated by a colon (:). A null directory name in **CDPATH** is the same as the current directory, i.e., ``.``. If dir begins with a slash (/), then **CDPATH** is not used. The **-P** option causes **cd** to use the physical directory structure by resolving symbolic links while traversing dir and before processing instances of `..` in dir (see also the **-P** option to the **set** builtin command); the **-L** option forces symbolic links to be followed by resolving the link after processing instances of `..` in dir. If `..` appears in dir, it is processed by removing the immediately previous pathname component from dir, back to a slash or the beginning of dir. If the **-e** option is supplied with **-P**, and the current working directory cannot be successfully determined after a successful directory change, **cd** will return an unsuccessful status. On systems that support it, the **-@** option presents the extended attributes associated with a file as a directory. An argument of `-` is converted to **\$OLDPWD** before the directory change is attempted. If a non-empty directory name from **CDPATH** is used, or if `-` is the first argument, and the directory change is successful, the absolute pathname of the new working directory is written to the standard output. The return value is true if the directory was successfully changed; false otherwise.

Рисунок 10 - Справка по команде **cd**

```
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
        avoid all symlinks

    --help display this help and exit

    --version
        output version information and exit

    If no option is specified, -P is assumed.

    NOTE: 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
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SEE ALSO
    getcwd(3)

    Full documentation <https://www.gnu.org/software/coreutils/pwd>
    or available locally via: info '(coreutils) pwd invocation'

GNU coreutils 8.32                    July 2021                                PWD(1)
Manual page pwd(1) line 1/45 (END) (press h for help or q to quit)
```

Рисунок 11 - Справка по команде pwd

```
MKDIR(1) User Commands MKDIR(1)

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

  -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.

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SEE ALSO
  mkdir(2)

  Full documentation <https://www.gnu.org/software/coreutils/mkdir>
  or available locally via: info '(coreutils) mkdir invocation'

GNU coreutils 8.32 July 2021
Manual page mkdir(1) line 1/50 (END) (press h for help or q to quit) MKDIR(1)
```

Рисунок 12 - Справка по команде mkdir

```
RMDIR(1)                                     User Commands                               RMDIR(1)

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 that is solely because a directory
      is non-empty

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

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SEE ALSO
  rmdir(2)

  Full documentation <https://www.gnu.org/software/coreutils/rmdir>
  or available locally via: info '(coreutils) rmdir invocation'

GNU coreutils 8.32                          July 2021                               RMDIR(1)
Manual page rmdir(1) line 1/46 (END) (press h for help or q to quit)
```

Рисунок 13 - Справка по команде rmdir

```

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, -g, 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

  --preserve-root[=all]
    do not remove '/' (default); with 'all', reject any command line argument on a separate device from its parent

  -r, -R, --recursive
    remove directories and their contents recursively

  -d, --dir
    remove empty directories

  -v, --verbose
    explain what is being done

  --help
    display this help and exit

  --version
    output version information and exit

  By default, rm does not remove directories.  Use the --recursive (-r or -R) option to remove each listed directory, too, along with all of its contents.

  To remove a file whose name starts with a '-', for example '-foo', use one of these commands:

      rm -- -foo

      rm ./-foo
Manual page rm(1) line 1 (press h for help or q to quit)

```

Рисунок 14 - Справка по команде rm

```
[eaalmazova@fedora ~]$ man ls
[eaalmazova@fedora ~]$ man cd
[eaalmazova@fedora ~]$ man cd
[eaalmazova@fedora ~]$ man pwd
[eaalmazova@fedora ~]$ man mkdir
[eaalmazova@fedora ~]$ man rmdir
[eaalmazova@fedora ~]$ man rm
[eaalmazova@fedora ~]$ man cd
[eaalmazova@fedora ~]$ man pwd
[eaalmazova@fedora ~]$
[eaalmazova@fedora ~]$ man mkdir
[eaalmazova@fedora ~]$ man rmdir
```

Рисунок 15 - Выполнение команд man ls, man cd и др.

Модификация команд

Используя команду `history 5`, я узнала последние 5 выполненных команд. С помощью команд `!180:s/a/l` и `!181:s/F/a` я соответственно модифицировала команды `ls -a` и `ls -F` к виду `ls -l` и `ls -a` (рис.16).

```

[eaalmazova@fedora ~]$ ls -a
.          .bash_logout  .cache  Documents  .gnupg  .mozilla  Public  .texlive2021  .vboxclient-draganddrop.pid  .wget-hsts
..         .bash_profile .config Downloads .lessht  Music   .ssh    .vboxclient-clipboard.pid  .vboxclient-seamless.pid  work
.bash_history .bashrc      Desktop .gitconfig .local  Pictures Templates .vboxclient-display-svg-x11.pid Videos

[eaalmazova@fedora ~]$ ls -F
Desktop/ Documents/ Downloads/ Music/ Pictures/ Public/ Templates/ Videos/ work/

[eaalmazova@fedora ~]$ history 5
178 man mkdir
179 man rmdir
180 ls -a
181 ls -F
182 history 5

[eaalmazova@fedora ~]$ !180:s/a/l
ls -l
total 0
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Desktop
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Documents
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 29 19:07 Downloads
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Music
drwxr-xr-x. 1 eaalmazova eaalmazova 234 Apr 22 23:35 Pictures
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Public
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Templates
drwxr-xr-x. 1 eaalmazova eaalmazova 0 Apr 22 15:45 Videos
drwxrwxr-x. 1 eaalmazova eaalmazova 10 Apr 22 16:32 work

[eaalmazova@fedora ~]$ !181:s/F/a
ls -a
.          .bash_logout  .cache  Documents  .gnupg  .mozilla  Public  .texlive2021  .vboxclient-draganddrop.pid  .wget-hsts
..         .bash_profile .config Downloads .lessht  Music   .ssh    .vboxclient-clipboard.pid  .vboxclient-seamless.pid  work
.bash_history .bashrc      Desktop .gitconfig .local  Pictures Templates .vboxclient-display-svg-x11.pid Videos

```

Рисунок 16 - Использование команды history и модификация команд

Выводы

В ходе выполнения данной лабораторной работы я приобрела практические навыки взаимодействия пользователя с системой посредством командной строки.

Спасибо за внимание!