

# Лабораторная работа №7

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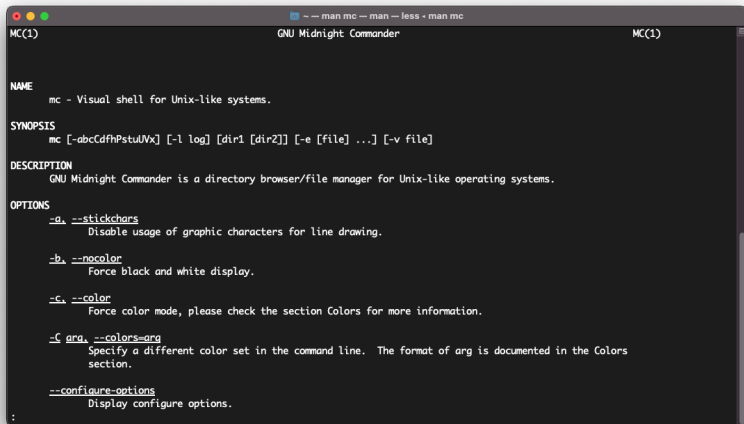
Освоение основных возможностей командной оболочки Midnight Commander. Приобретение навыков практической работы по просмотру каталогов и файлов; манипуляций с ними.

- Задания по МС
  - Операции с файлами
  - Поиск по файлам
  - Изучение интерфейса
  - Настройка оболочки
- Задания по встроенному редактору
  - Создание файла
  - Изменение: копирование, вставка, переходы и т.д.
  - Подсветка синтаксиса

## Выполнение лабораторной работы

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# Выполнение лабораторной работы



```
MC(1)                                GNU Midnight Commander                                MC(1)

NAME
  mc - Visual shell for Unix-like systems.

SYNOPSIS
  mc [-abcCdFhPstuUVx] [-l log] [dir1 [dir2]] [-e [file] ...] [-v file]

DESCRIPTION
  GNU Midnight Commander is a directory browser/file manager for Unix-like operating systems.

OPTIONS
  -a, --stickchars
      Disable usage of graphic characters for line drawing.

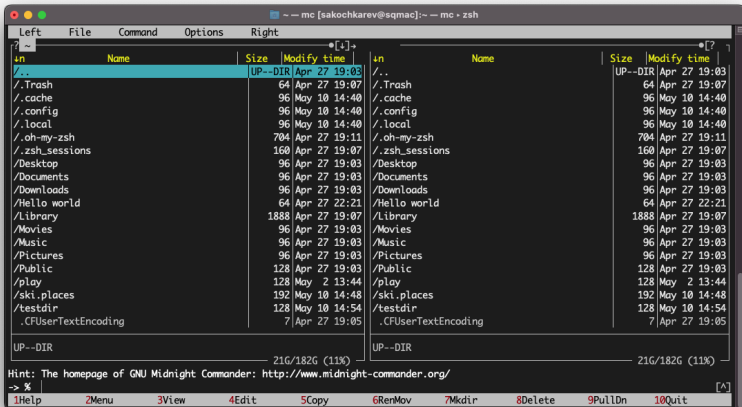
  -b, --nocolor
      Force black and white display.

  -c, --color
      Force color mode, please check the section Colors for more information.

  -C arg, --colors=arg
      Specify a different color set in the command line. The format of arg is documented in the Colors
      section.

  --configure-options
      Display configure options.

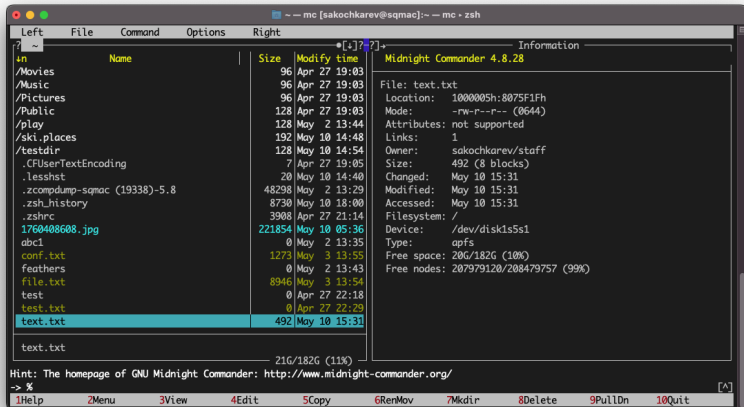
:
```

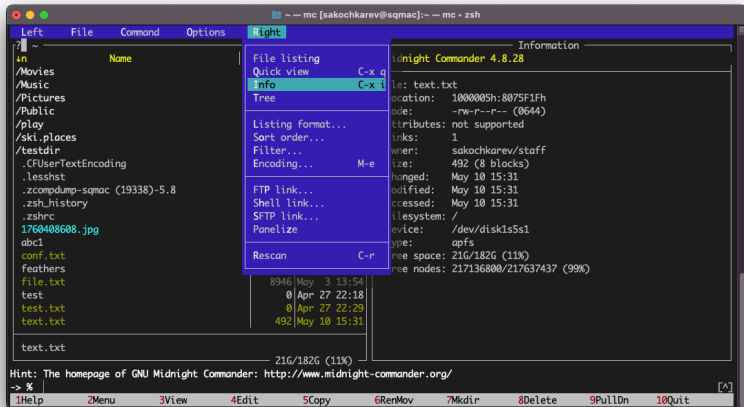


- Выделение/отмена выделения файлов
- Копирование/перемещение файлов
- Получение информации о файле/каталоге

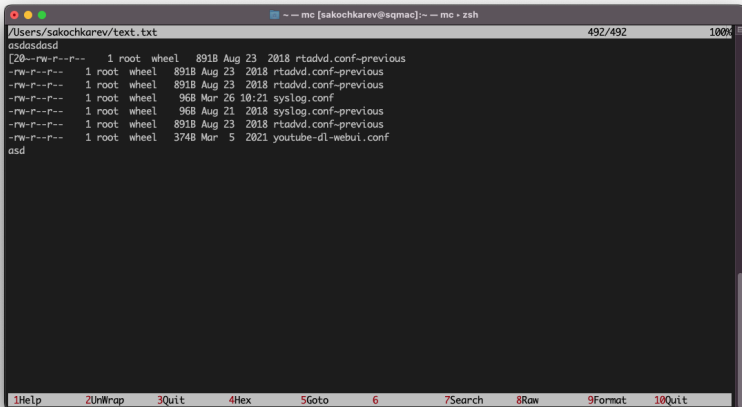
Left	File	Command	Options	Right
?	~			•[↓]→
↓n	Name	Size	Modify time	
/Movies		96	Apr 27 19:03	
/Music		96	Apr 27 19:03	
/Pictures		96	Apr 27 19:03	
/Public		128	Apr 27 19:03	
/play		128	May 2 13:44	
/ski.places		192	May 10 14:48	
/testdir		128	May 10 14:54	
.CFUserTextEncoding		7	Apr 27 19:05	
.lessht		20	May 10 14:40	
.zcompdump-sqmac (19338)-5.8		48298	May 2 13:29	
.zsh_history		8730	May 10 18:00	
.zshrc		3908	Apr 27 21:14	
1760408608.jpg		221854	May 10 05:36	
abc1		0	May 2 13:35	
conf.txt		1273	May 3 13:55	
feathers		0	May 2 13:43	
file.txt		8946	May 3 13:54	
test		0	Apr 27 22:18	
test.txt		0	Apr 27 22:29	
text.txt		492	May 10 15:31	
0 B in 2 files				
file.txt				
20G/182G (11%)				







- Просмотрели содержимое текстового файла
- Отредактировали его
- Создали каталог
- Скопировали файлы в созданный каталог



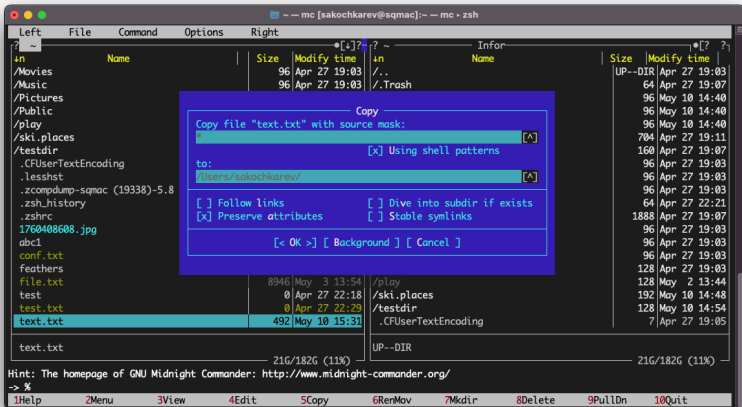
The image shows a macOS terminal window with a dark background. The title bar at the top indicates the window is titled "mc [sakochkarev@sqmac]: ~ - mc - zsh". The terminal content shows the user is in the directory "/Users/sakochkarev/text.txt" and has typed "asdasdasd". Below this, a file listing is displayed, showing permissions, owner, group, size, date, and filename. The files listed are "rtadvd.conf-previous" and "syslog.conf", with their previous versions. The listing is as follows:

```
[20~rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 96B Mar 26 10:21 syslog.conf
-rw-r--r-- 1 root wheel 96B Aug 21 2018 syslog.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 374B Mar 5 2021 youtube-dl-webui.conf
asd
```

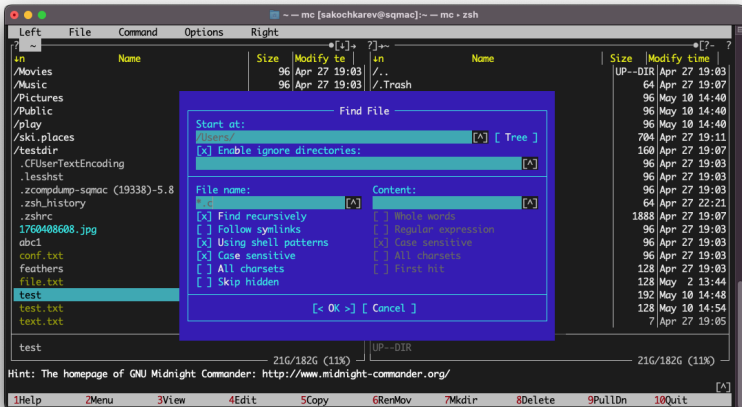
At the bottom of the terminal window, there is a status bar with the following text: "1Help 2UnWrap 3Quit 4Hex 5Goto 6 7Search 8Raw 9Format 10Quit".

```
text.txt [----] 9 L:[ 1+ 0 1/ 9] *(9 / 492b) 0010 0x00A [~][
asdasdasd
[20~rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 96B Mar 26 10:21 syslog.conf
-rw-r--r-- 1 root wheel 96B Aug 21 2018 syslog.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 374B Mar 5 2021 youtube-dl-webui.conf
asd

1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```



- выполнили поиск с заданными условиями
- выбрали и повторили предыдущие команды
- перешли в домашний каталог
- проанализировали файлы меню и расширений







```
~/work/study/2021-2022/Операционные системы/os-intro/labs/lab7/report -- mc [sakochkarev@sqmac]:~ -- mc - zsh
...s/lab7/report      -zsh ...      ...е системы/os-intro/labs/lab7/report -- mc [sakochkarev@sqmac]:~ -- mc - zsh
menu [-----] 0 L:[337+13 350/370] *(11225/11820b) 0032 0x020 [t]
    gunzip -v %f
    bzip2 -v "$D"
fi

+ t t
C Convert gz->bz2, tar.gz->tar.bz2 & tgz->tar.bz2
for i in %t ; do
    unset D
    unset EXT
    case "$i" in
        *.Z) EXT=Z;;
        *.bz2) EXT=bz2;;
        *.gz) EXT=gz;;
        *.tgz) EXT=tgz;;
        *.tpz) EXT=tpz;;
        *.z) EXT=z;;
    esac
    case "$EXT" in
        bz2|Z|gz|z) D=`basename "$i" ".$EXT"`;;
        tgz|tpz) D=`basename "$i" ".$EXT".tar`;
    esac
    if [ "$EXT" = "bz2" ]; then
        bunzip2 -v "$i"
        gzip -f9 -v "$D"
    else
        gunzip -v "$i"
        bzip2 -v "$D"
    fi
done

1Help      2Save      3Mark      4Replac      5Copy      6Move      7Search      8Delete      9PullDn      10Quit
```

```
mc.ext  [----]  0 L:[823+26 849/849] *(28734/28734b) <EOF> [z]

### Includes
# includes should be at end of bindings

include/editor
<----->Open=%var{EDITOR:vi} %f

include/image
<----->Open=/usr/local/Cellar/midnight-commander/4.8.28/libexec/mc/ext.d/image.sh open ALL_FORMATS
<----->View=%view{ascii} /usr/local/Cellar/midnight-commander/4.8.28/libexec/mc/ext.d/image.sh view ALL_FORMATS

include/video
<----->Open=/usr/local/Cellar/midnight-commander/4.8.28/libexec/mc/ext.d/video.sh open ALL_FORMATS
<----->View=%view{ascii} /usr/local/Cellar/midnight-commander/4.8.28/libexec/mc/ext.d/video.sh view ALL_FORMATS

### Default ###

# Default target for anything not described above
default/*
<----->Open=
<----->View=

### EOF ###

1Help      2Save      3Mark      4Replac    5Copy      6Move      7Search    8Delete    9PullDn   10Quit
```

Options

Right

Configuration...

Layout...

Panel options...

Confirmation...

Appearance...

Display bits...

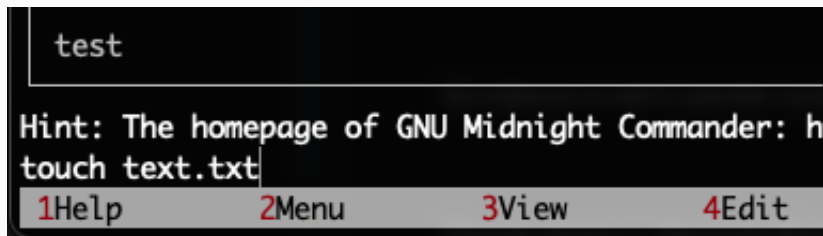
Learn keys...

Virtual FS...

Save setup

Следующие задания были связаны с встроенным редактором тс.

Создание текстового файла `text.txt`.



The screenshot shows the GNU Midnight Commander (MC) interface. At the top, a dark panel displays the word "test" in white text. Below this, a hint message reads: "Hint: The homepage of GNU Midnight Commander: h" followed by "touch text.txt" on the next line. At the bottom, a light gray menu bar contains four items: "1Help", "2Menu", "3View", and "4Edit", each with a red number prefix.

Открыли его во встроенном редакторе.

```
mc [sakochkarev@sqmac]:~ mc - zsh
text.txt [----] 3 L: 1+ 8 9/ 9] *(492 / 492b) <EOF>
asdasdasd
[20--rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 96B Mar 26 10:21 syslog.conf
-rw-r--r-- 1 root wheel 96B Aug 21 2018 syslog.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 374B Mar 5 2021 youtube-dl-webui.conf
asd
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

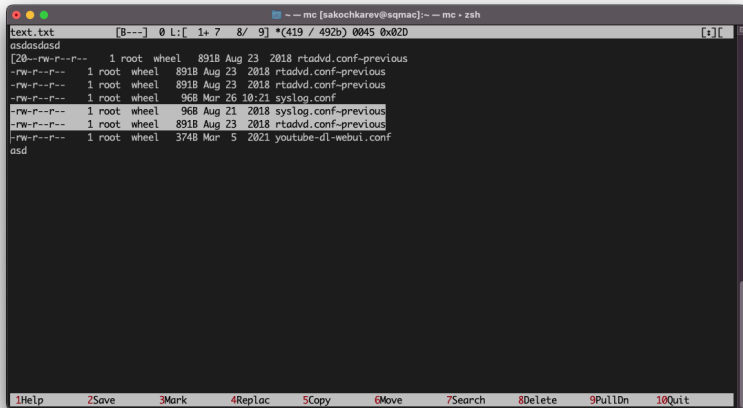
Вставили в него ранее скопированный фрагмент из другого файла.

Edit	Search	Command
Undo		C-u
Redo		M-r
Toggle ins/overw		Ins
Toggle mark		F3
Mark columns		F13
Mark all		
Unmark		
Copy		F5
Move		F6
Delete		F8
Copy to clipfile		C-Ins
Cut to clipfile		S-Del
Paste from clipfile		S-Ins
Beginning		C-Home
End		C-End



## Манипуляции с текстом

- Удаление строки текста
- Выделение и копирование фрагмента текста на новую строку

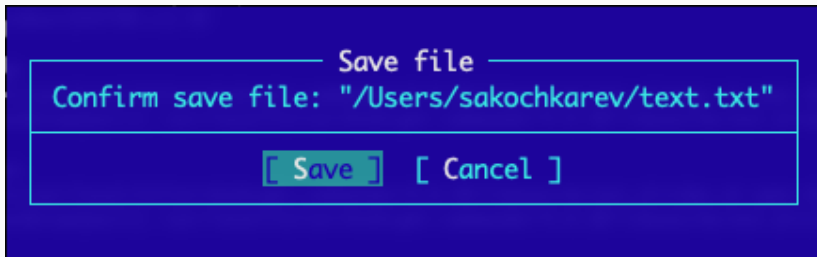


The screenshot shows a macOS terminal window with a dark background. The title bar at the top indicates the user is 'mc [sakochkarev@sqmac]:~ - mc - zsh'. The terminal content shows a file listing command being executed, displaying permissions, owner, group, size, date, and filename for various files. A selection bar is visible, highlighting several lines of the listing. At the bottom of the terminal window, there is a menu bar with the following items: 1Help, 2Save, 3Mark, 4Replac, 5Copy, 6Move, 7Search, 8Delete, 9PullDn, and 10Quit.

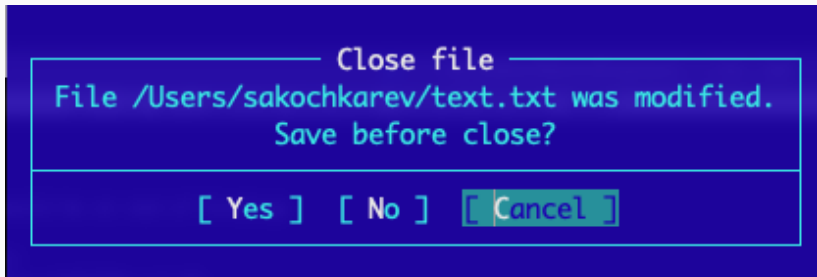
```
text.txt [B---] 0 L: 1+ 7 8/ 9] *(419 / 492b) 0045 0x02D [[:]
asdasdasd
[20~rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 96B Mar 26 10:21 syslog.conf
-rw-r--r-- 1 root wheel 96B Aug 21 2018 syslog.conf-previous
-rw-r--r-- 1 root wheel 891B Aug 23 2018 rtadvd.conf-previous
-rw-r--r-- 1 root wheel 374B Mar 5 2021 youtube-dl-webui.conf
asd
```

1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit

- Выделение и перенос фрагмента текста на новую строку
- Сохранение файла



- Сохранение и закрытие файла



- Отмена последнего действия
- Переход в конец файла и добавление текста
- Переход в начало файла и добавление текста

```
mc [sakochkarev@sqmac]:~ -- mc - zsh
_quoting.c [----] 1 L: 1+ 3 4/12200 *(61 /467308b) 0105 0x069
/* Generated by Cython 0.29.14 */

#define PY_SSIZE_T_CLEAN
#include "Python.h"
#ifndef Py_PYTHON_H
    #error Python headers needed to compile C extensions, please install development version of Python.
#elif PY_VERSION_HEX < 0x02060000 || (0x03000000 <= PY_VERSION_HEX && PY_VERSION_HEX < 0x03030000)
    #error Cython requires Python 2.6+ or Python 3.3+.
#else
#define CYTHON_ABI "0.29.14"
#define CYTHON_HEX_VERSION 0x001D0EF0
#define CYTHON_FUTURE_DIVISION 1
#include <stddef.h>
#ifndef offsetof
#define offsetof(type, member) ( (size_t) & ((type*)0) -> member )
#endif
#if !defined(WIN32) && !defined(MS_WINDOWS)
#ifndef __stdcall
#define __stdcall
#endif
#endif
#ifndef __cdecl
#define __cdecl
#endif
#ifndef __fastcall
#define __fastcall
#endif
#endif
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn 10Quit
```

## Choose syntax highlighting

< Auto >

< Reload Current Syntax >

ASM Program

ASPX File

AWK File

ActionScript Program

Ada Program

Arch package build script

Arch package install script

Bind9 configuration

C Program

C# Program

C/C++ Program

CMake

\*

v

По выполнении лабораторной работы мы освоили основные возможности командной оболочки Midnight Commander, а также приобрели навыки практической работы по просмотру каталогов и файлов; манипуляций с ними.