

# Командная оболочка **Midnight Commander**

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## **Цели и задачи работы**

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# Цель лабораторной работы

Ознакомление с файловой системой Linux, её структурой, именами и содержанием каталогов. Приобретение практических навыков по применению команд для работы с файлами и каталогами, по управлению процессами, по проверке использования диска и обслуживанию файловой системы.

# Задачи лабораторной работы

- 1 Изучить возможности Midnight Commander
- 2 Изучить редактор Midnight Commander

# **Процесс выполнения лабораторной работы**

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# Работа с Midnight Commander

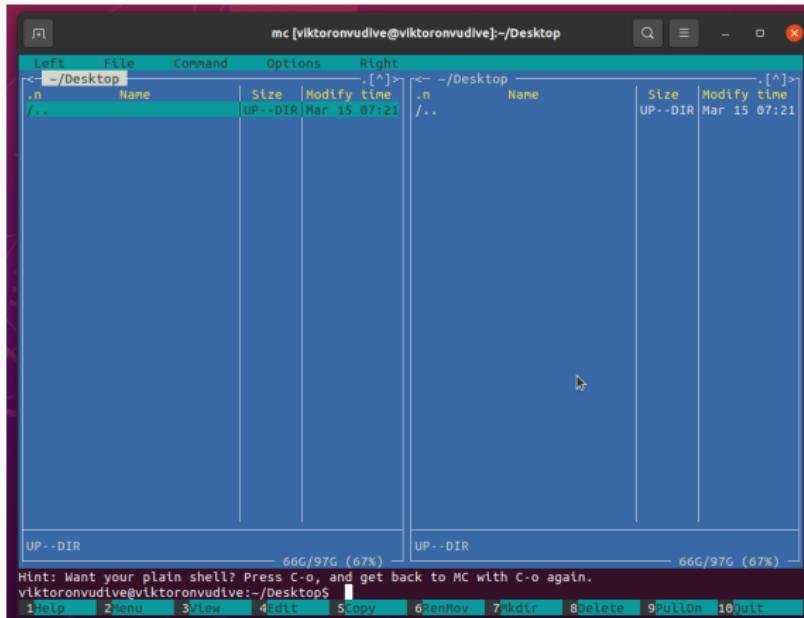


Рис. 1: Запуск mc

# Работа с Midnight Commander

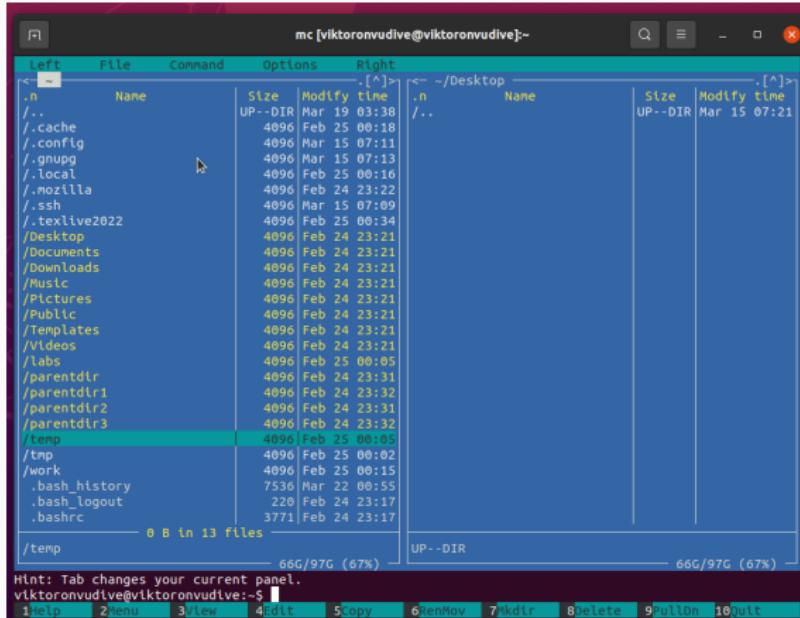


Рис. 2: Выделение

# Работа с Midnight Commander

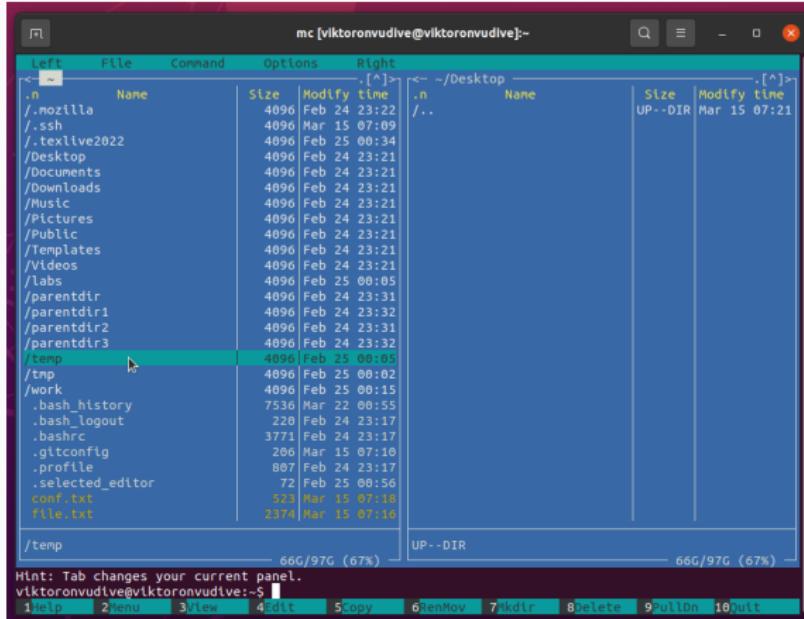


Рис. 3: Отмена

# Работа с Midnight Commander

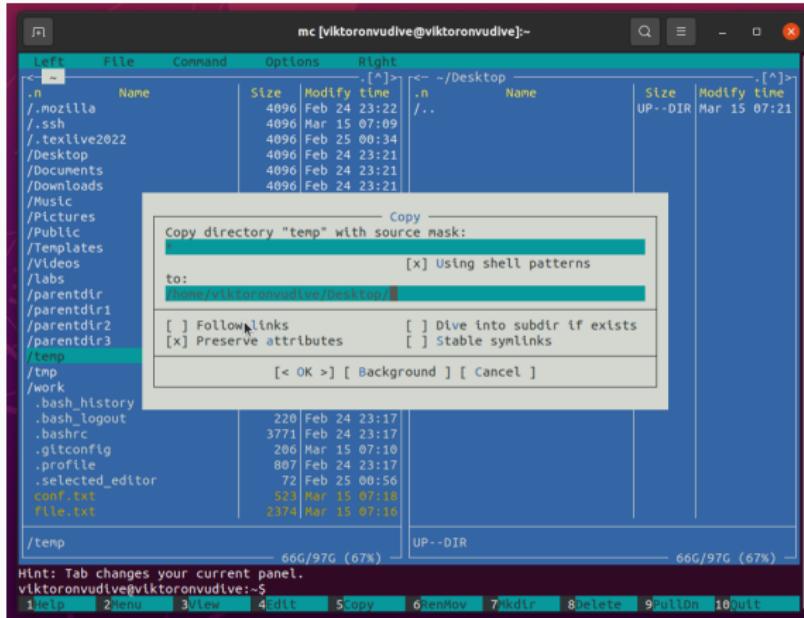


Рис. 4: Копирование

# Работа с Midnight Commander

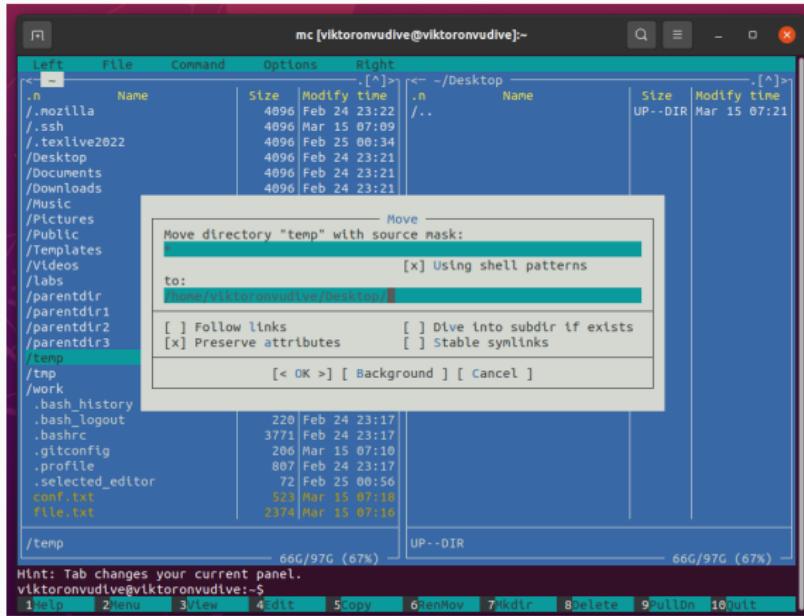


Рис. 5: Перемещение

# Работа с Midnight Commander

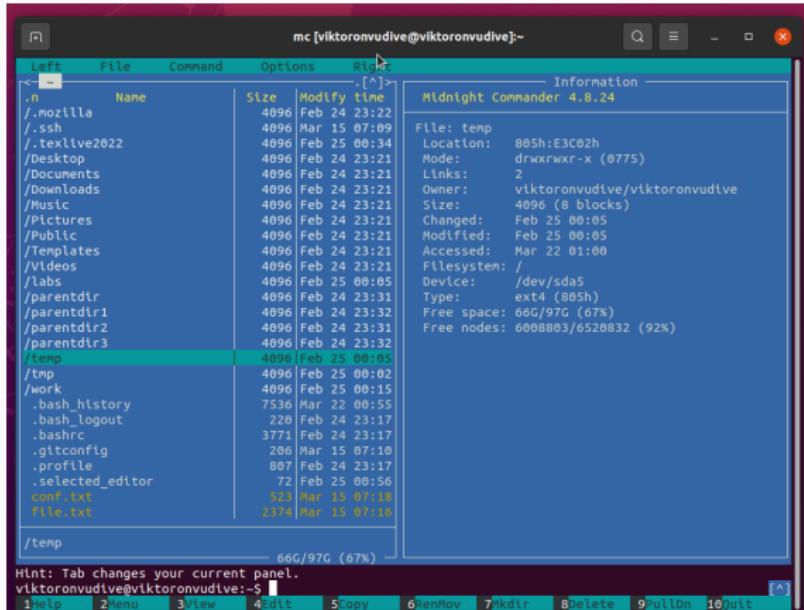


Рис. 6: Информация

# Работа с Midnight Commander

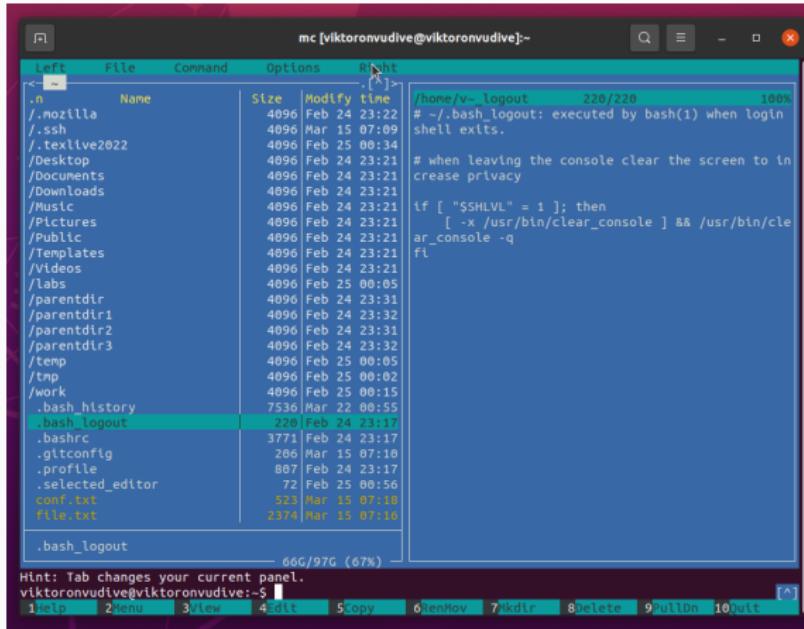


Рис. 7: Быстрый просмотр

# Работа с Midnight Commander

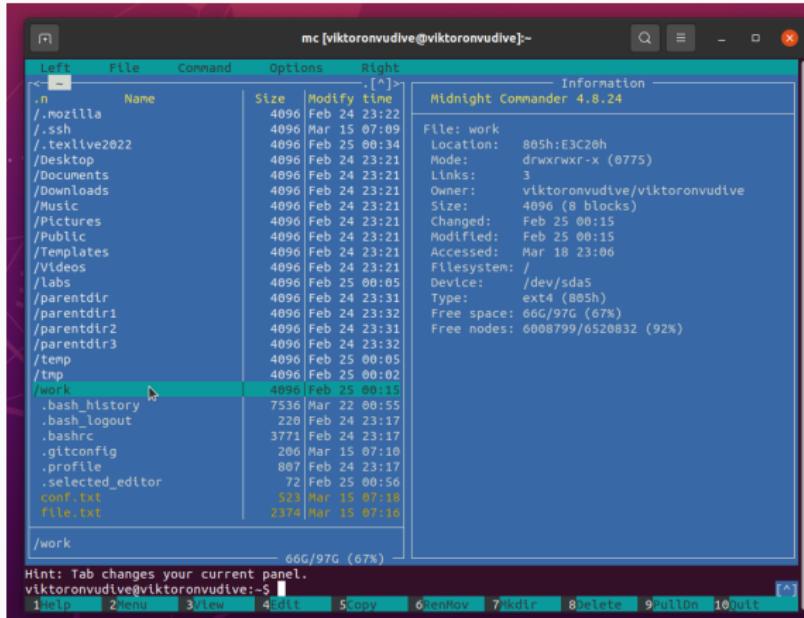


Рис. 8: Информация

# Работа с Midnight Commander

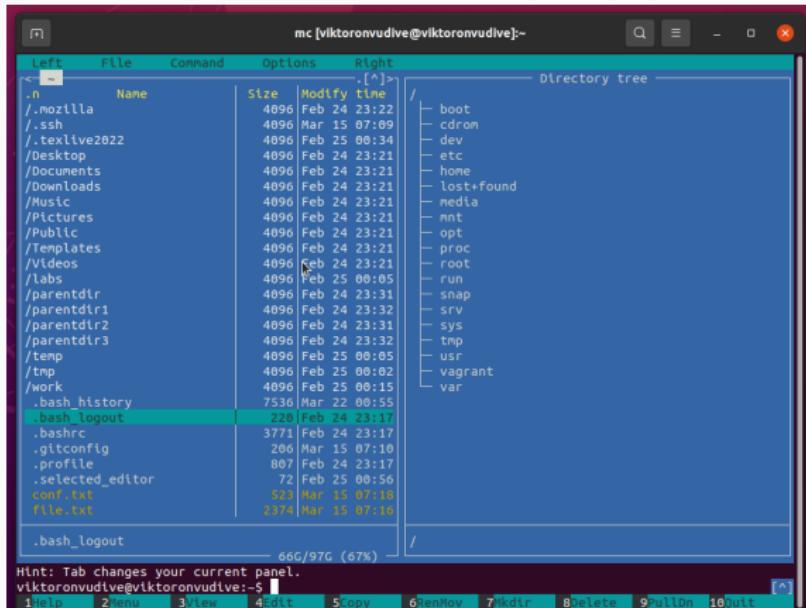
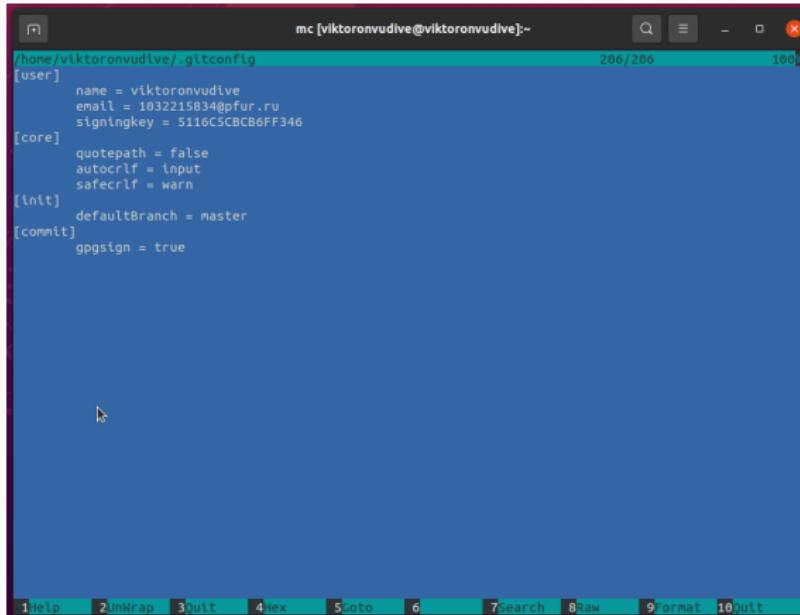


Рис. 9: Дерево каталогов

# Работа с Midnight Commander



**Рис. 10:** Просмотр содержимого текстового файла

# Работа с Midnight Commander

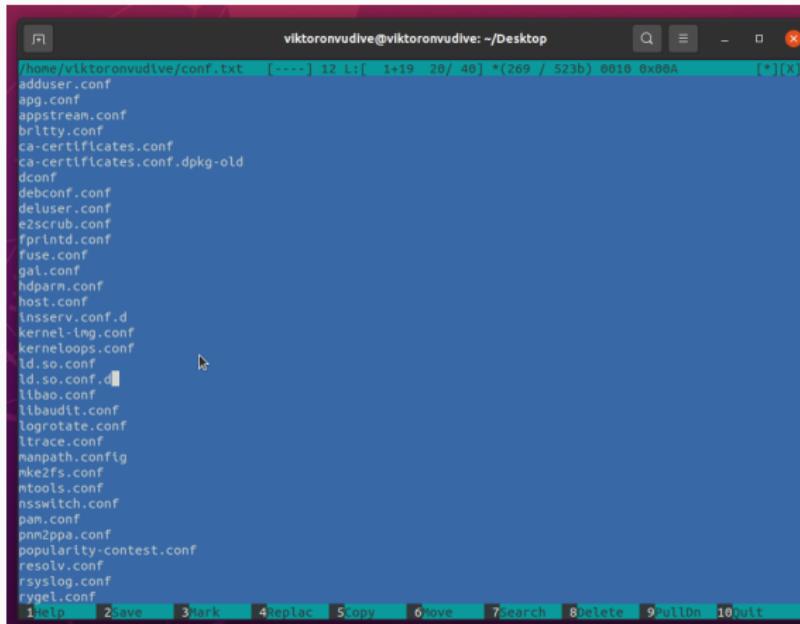


Рис. 11: Отредактируем содержимое текстового файла без сохранения результатов

# Работа с Midnight Commander

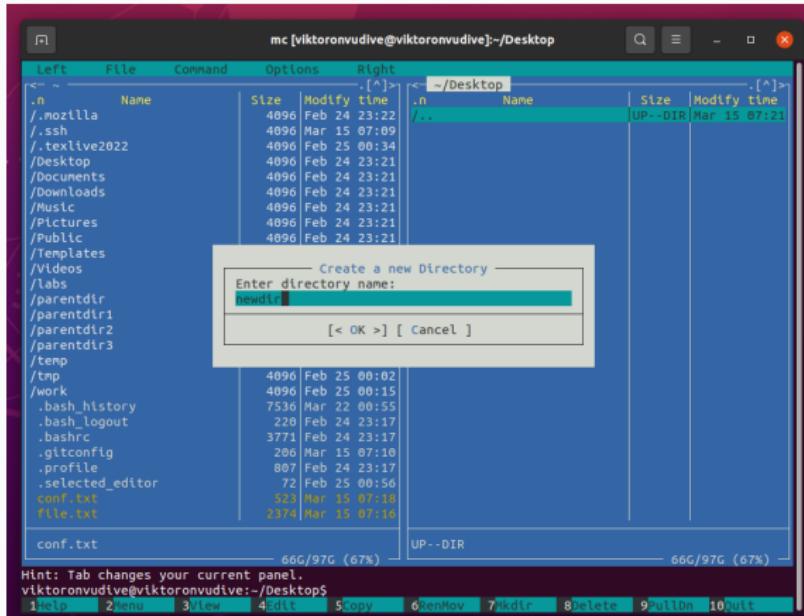


Рис. 12: Создание каталога

# Работа с Midnight Commander

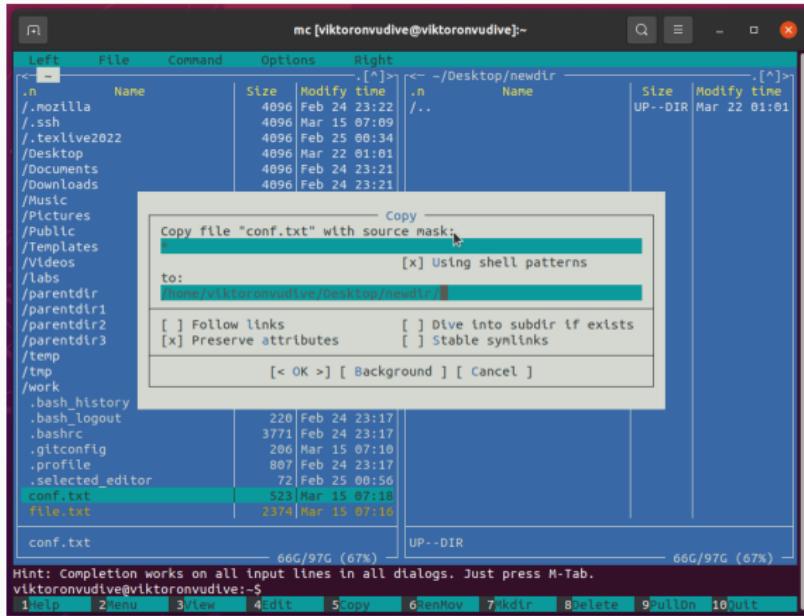


Рис. 13: Копирование файлов в созданный каталог

# Работа с Midnight Commander

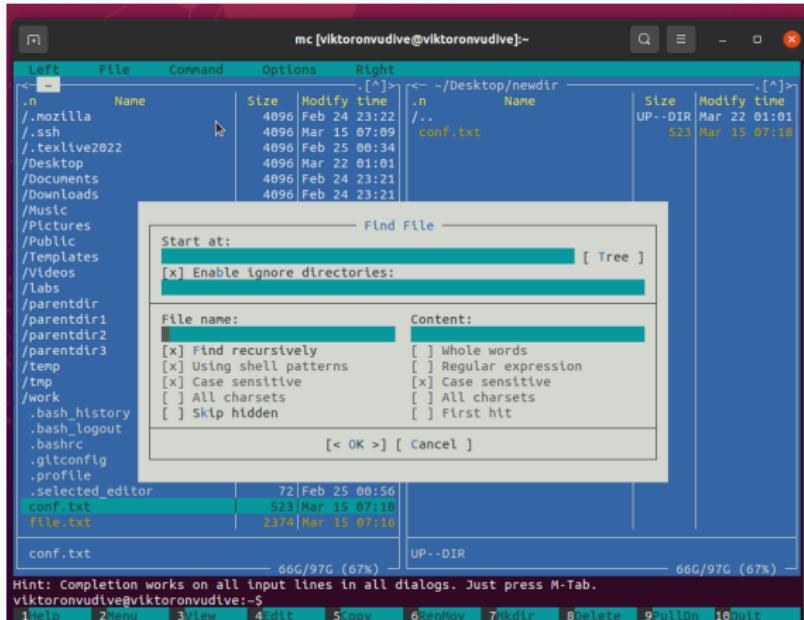


Рис. 14: Поиск файлов

# Работа с Midnight Commander

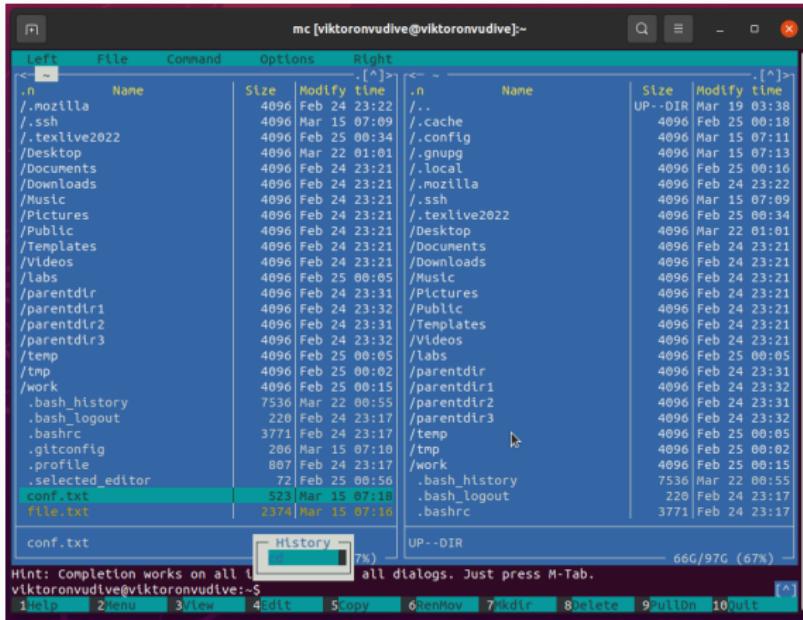


Рис. 15: История команд

# Работа с Midnight Commander

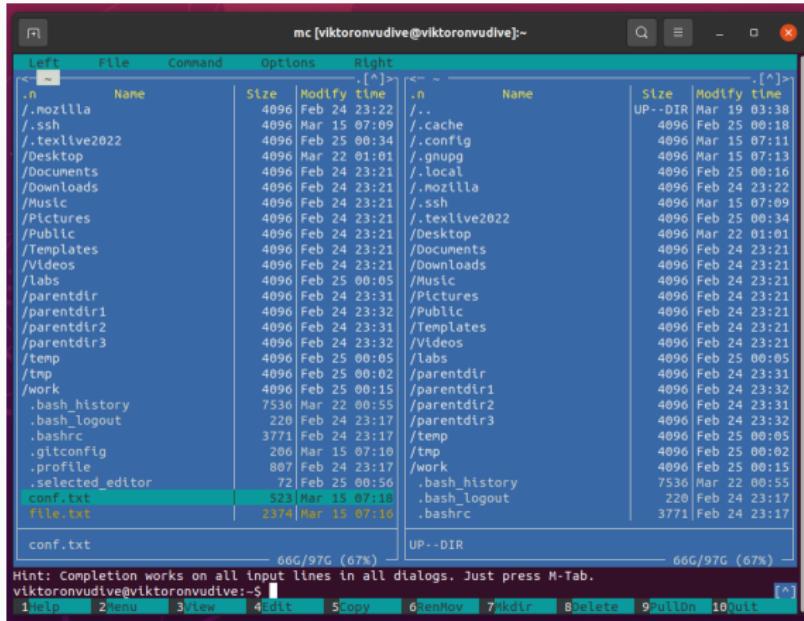
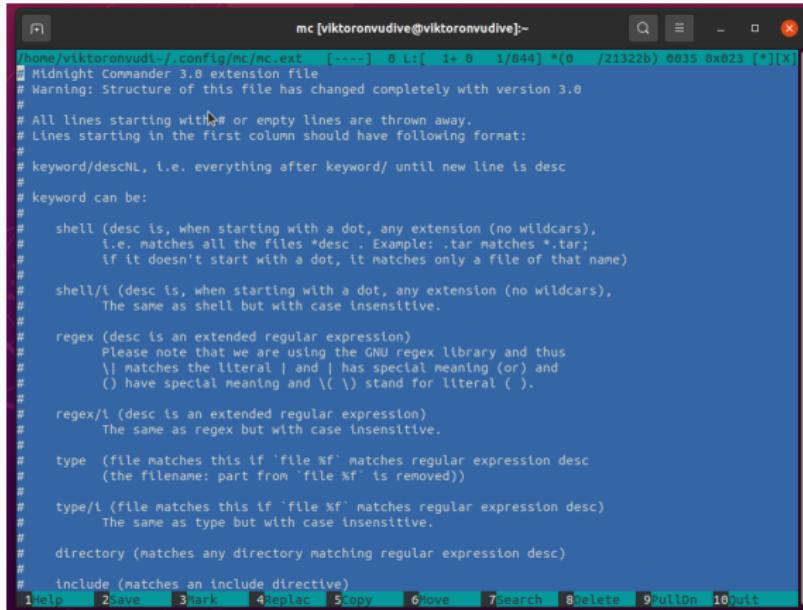


Рис. 16: Переход в домашний каталог

# Работа с Midnight Commander



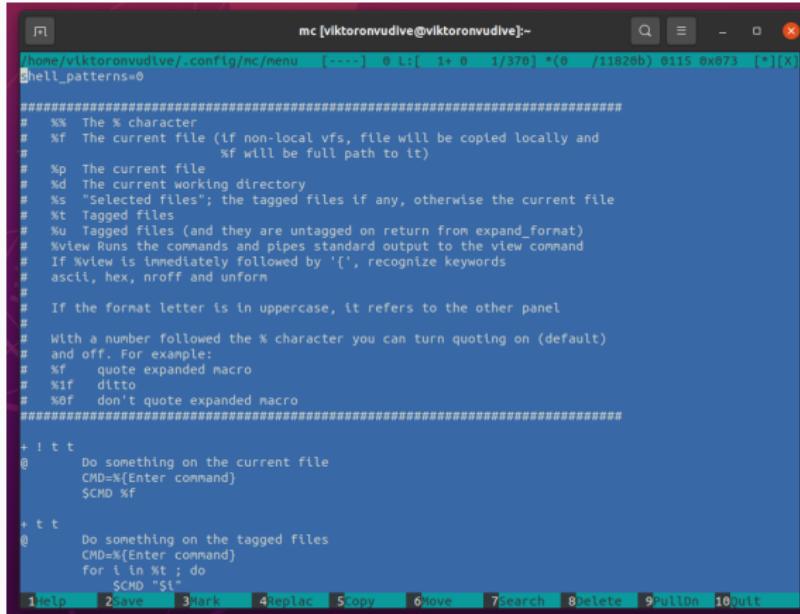
The screenshot shows a terminal window titled 'mc [viktoronvudive@viktoronvudive]:' running on a Linux system. The window displays the contents of the file '/home/viktoronvudive/.config/mc/mc.ext'. The file is a configuration script for the 'mc' command-line interface. It contains several sections of comments and examples for various command-line options:

- # Midnight Commander 3.0 extension file
- # Warning: Structure of this file has changed completely with version 3.0
- #
- # All lines starting with # or empty lines are thrown away.
- # Lines starting in the first column should have following format:
- #
- # keyword/descNL, i.e. everything after keyword/ until new line is desc
- #
- # keyword can be:
- #
- # shell (desc is, when starting with a dot, any extension (no wildcars),  
# i.e. matches all the files \*desc . Example: .tar matches \*.tar;  
# if it doesn't start with a dot, it matches only a file of that name)
- #
- # shell/i (desc is, when starting with a dot, any extension (no wildcars),  
# The same as shell but with case insensitive.)
- #
- # regex (desc is an extended regular expression)  
# Please note that we are using the GNU regex library and thus  
# \| matches the literal | and | has special meaning (or) and  
# () have special meaning and \(\ ) stand for literal ( ).
- #
- # regex/l (desc is an extended regular expression)  
# The same as regex but with case insensitive.
- #
- # type (file matches this if 'file %f' matches regular expression desc  
# (the filename: part from 'file %f' is removed))
- #
- # type/l (file matches this if 'file %f' matches regular expression desc)  
# The same as type but with case insensitive.
- #
- # directory (matches any directory matching regular expression desc)
- #
- # include (matches an include directive)

At the bottom of the terminal window, there is a menu bar with the following items: Help, Save, Mark, Replace, Copy, Move, Search, Delete, PullDown, and Exit. The 'Move' item is highlighted in red.

Рис. 17: Просмотр файла расширений

# Работа с Midnight Commander



The screenshot shows a terminal window titled "mc [viktoronvudive@viktoronvudive]:" with the command ".config/nc/menu" entered. The window displays the contents of the menu configuration file, which includes comments explaining various shell patterns and command definitions. At the bottom of the window, there is a green status bar with numbered keys from 1 to 10 corresponding to menu items: Help, Save, Mark, Replace, Copy, Move, Search, Delete, PullDown, and Quit.

```
# %% The % character
# %f The current file (if non-local vfs, file will be copied locally and
#       %f will be full path to it)
# %p The current file
# %d The current working directory
# %s "Selected files"; the tagged files if any, otherwise the current file
# %t Tagged files
# %u Tagged files (and they are untagged on return from expand_format)
# %view Runs the commands and pipes standard output to the view command
# If %view is immediately followed by '[', recognize keywords
# ascii, hex, nroff and unform
#
# If the format letter is in uppercase, it refers to the other panel
#
# With a number followed the % character you can turn quoting on (default)
# and off. For example:
# %f quote expanded macro
# %if ditto
# %of don't quote expanded macro
#####
+ ! t t
@      Do something on the current file
CMD=%{Enter command}
SCMD %F

+ t t
@      Do something on the tagged files
CMD=%{Enter command}
for i in %t ; do
    SCMD "$i"
```

Рис. 18: Просмотр файла меню

# Работа с Midnight Commander

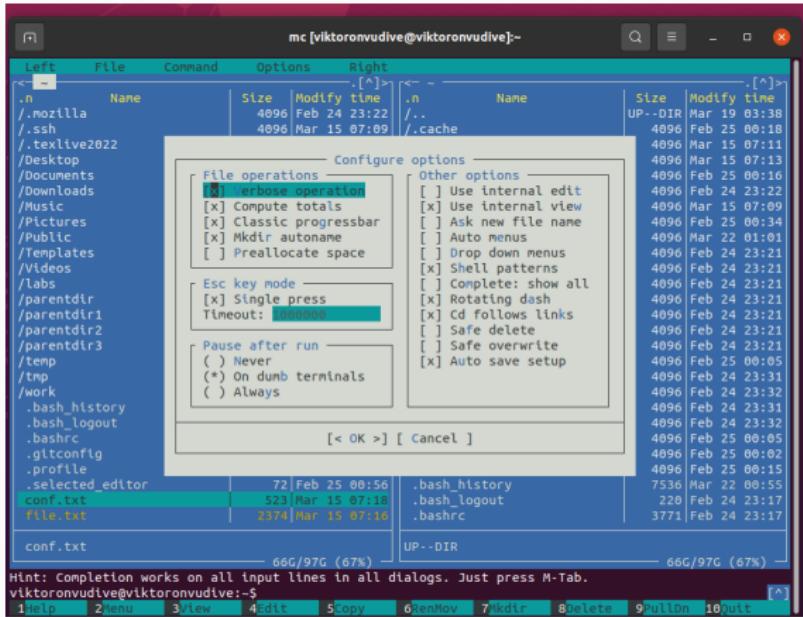


Рис. 19: Конфигурация

# Работа с Midnight Commander

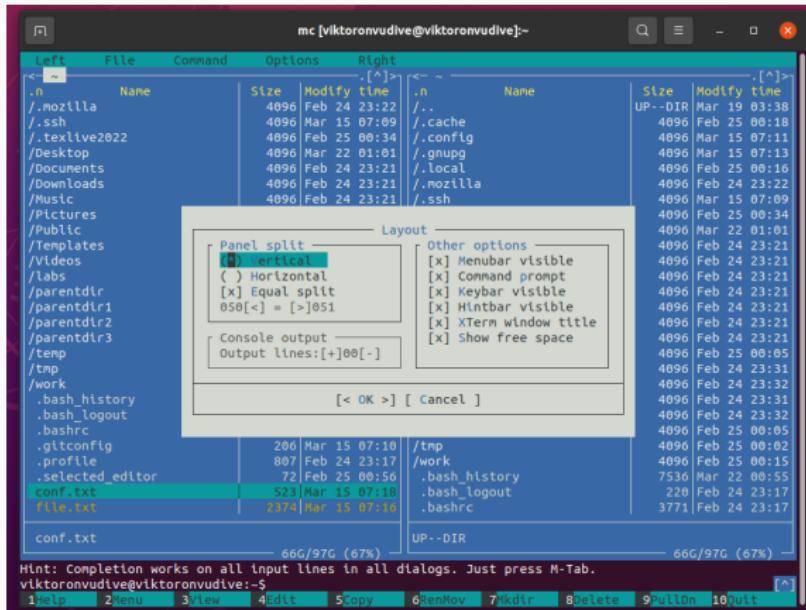


Рис. 20: Внешний вид

# Работа с Midnight Commander

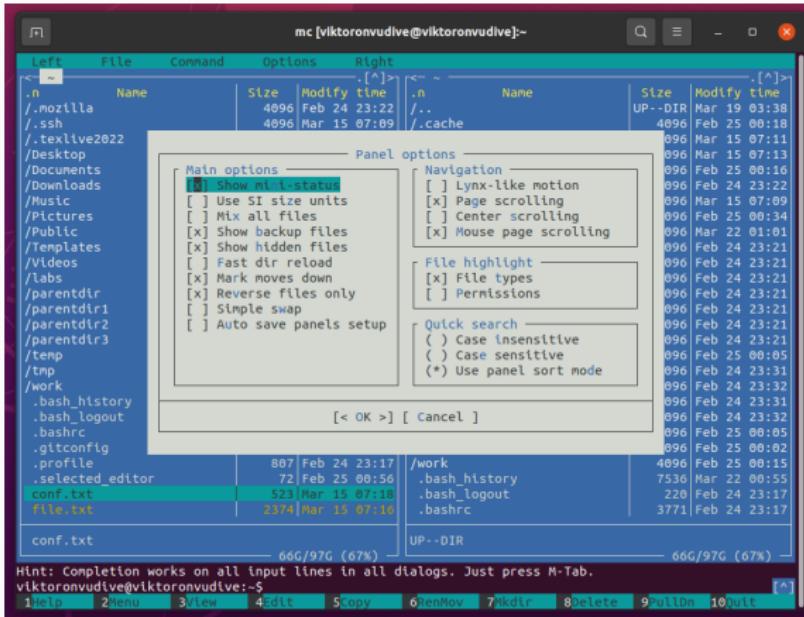


Рис. 21: Настройки панелей

# Работа с Midnight Commander

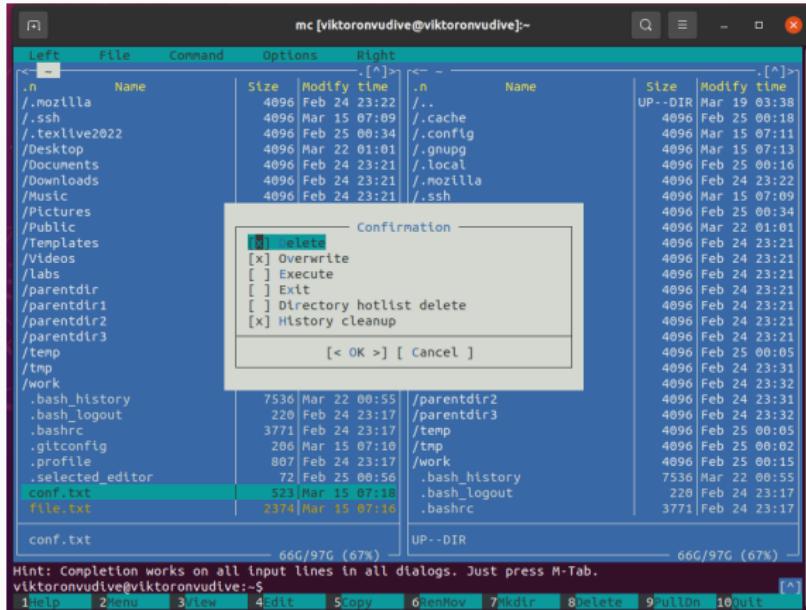


Рис. 22: Подтверждение

# Работа с Midnight Commander

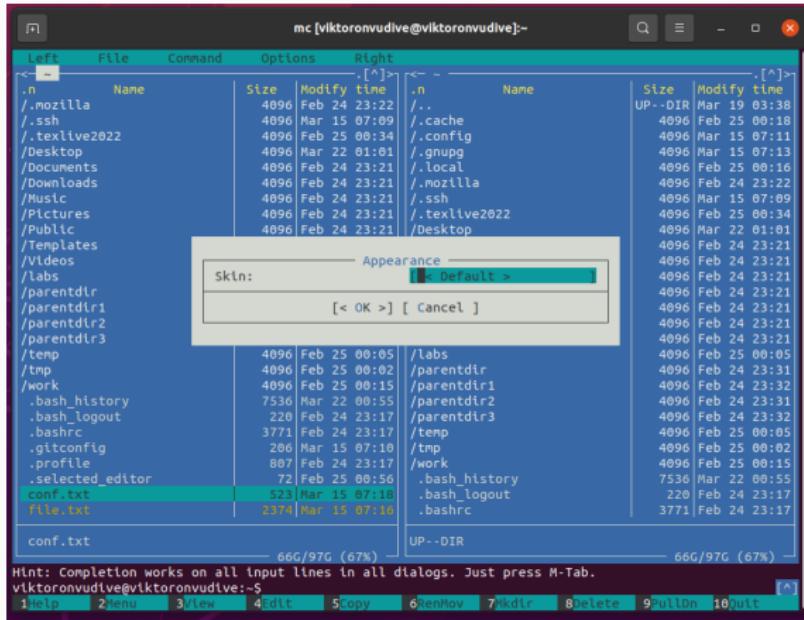


Рис. 23: Оформление

# Работа с Midnight Commander

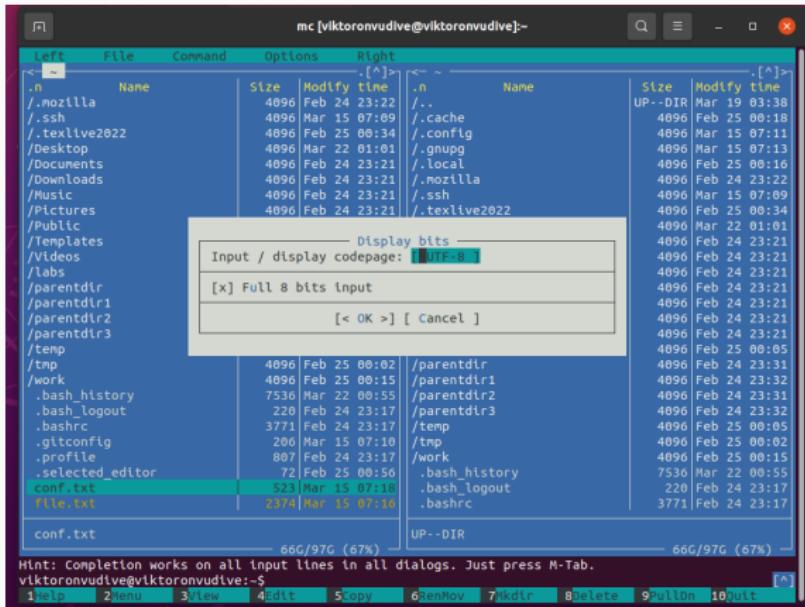


Рис. 24: Кодировка символов

# Работа с Midnight Commander

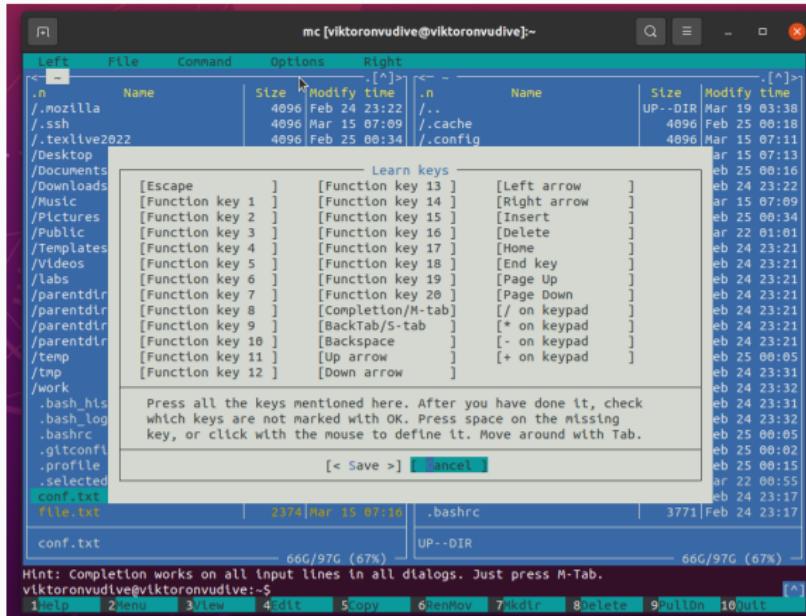


Рис. 25: Распознавание клавиш

# Работа с редактором Midnight Commander

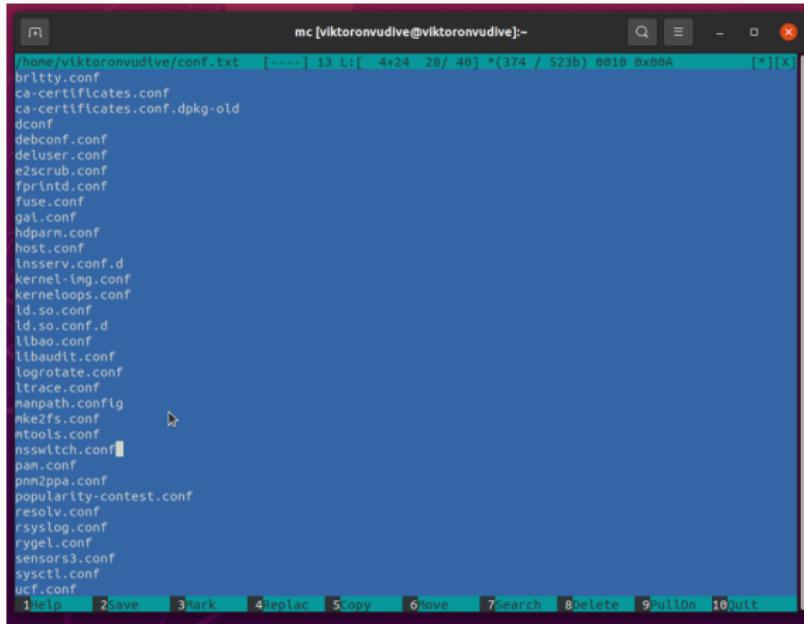


Рис. 26: Файл с текстом

# Работа с редактором Midnight Commander

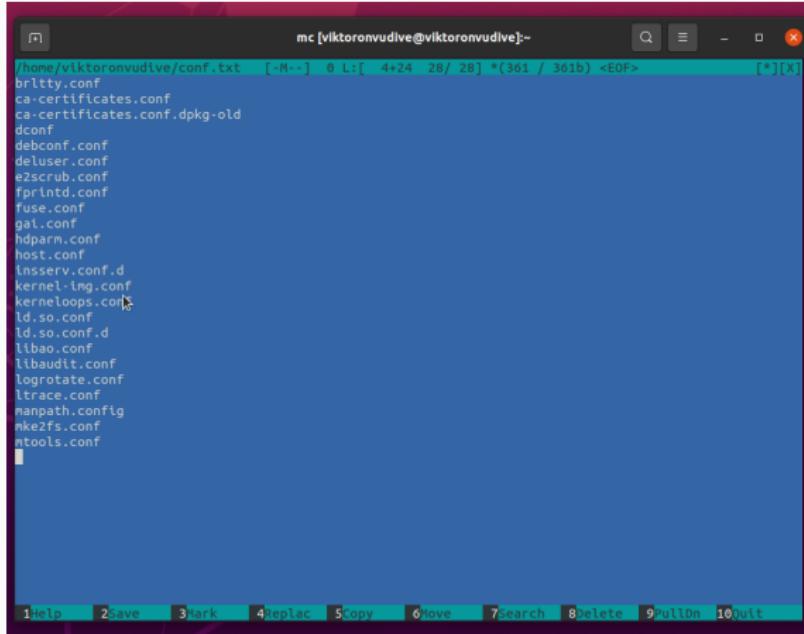


Рис. 27: Файл с текстом

# Работа с редактором Midnight Commander

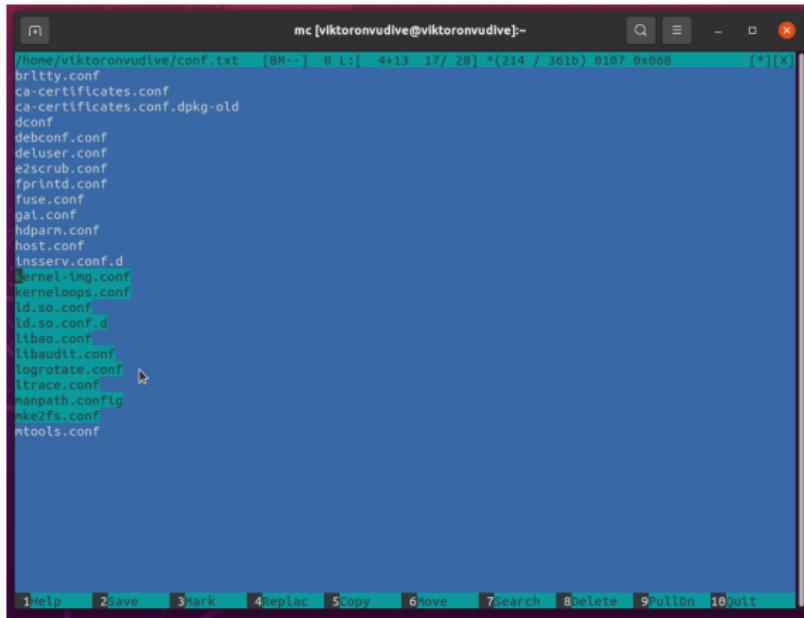


Рис. 28: Копирование фрагмента

# Работа с редактором Midnight Commander

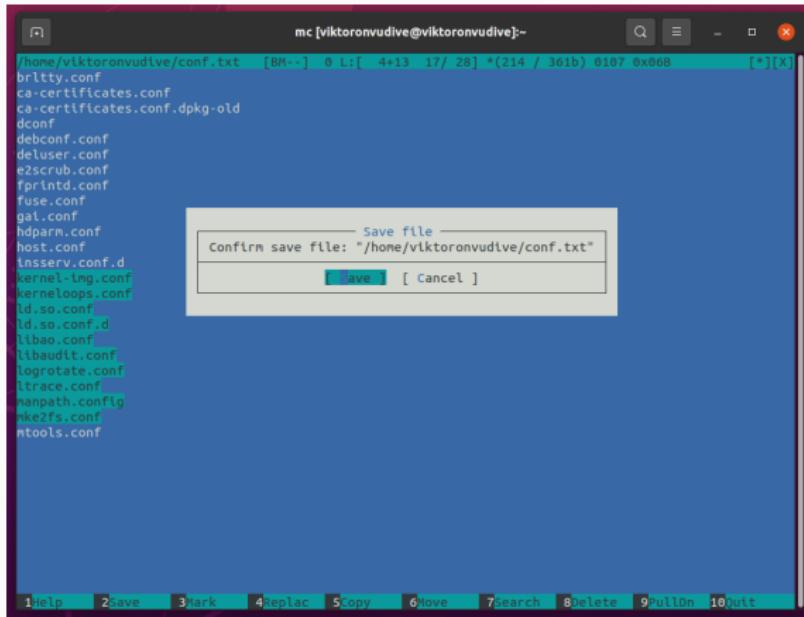


Рис. 29: Сохранение

# Работа с редактором Midnight Commander

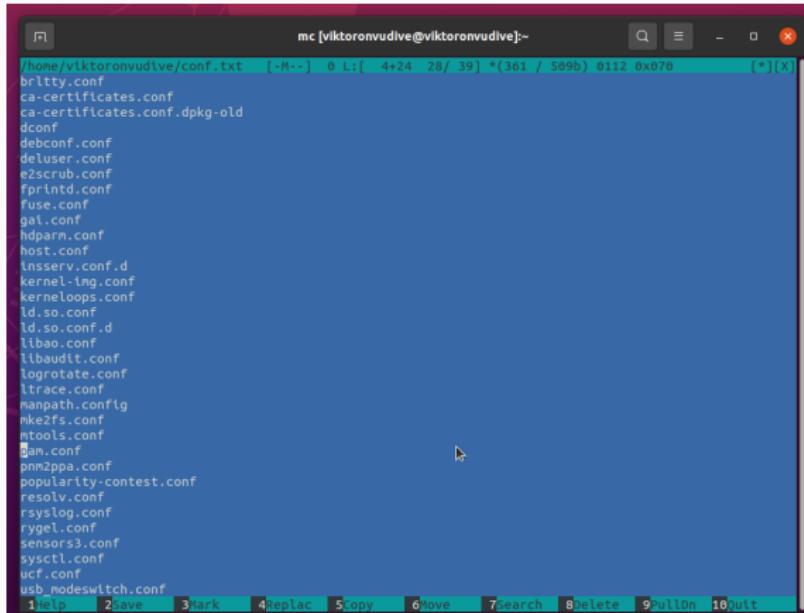


Рис. 30: Отмена

# Работа с редактором Midnight Commander

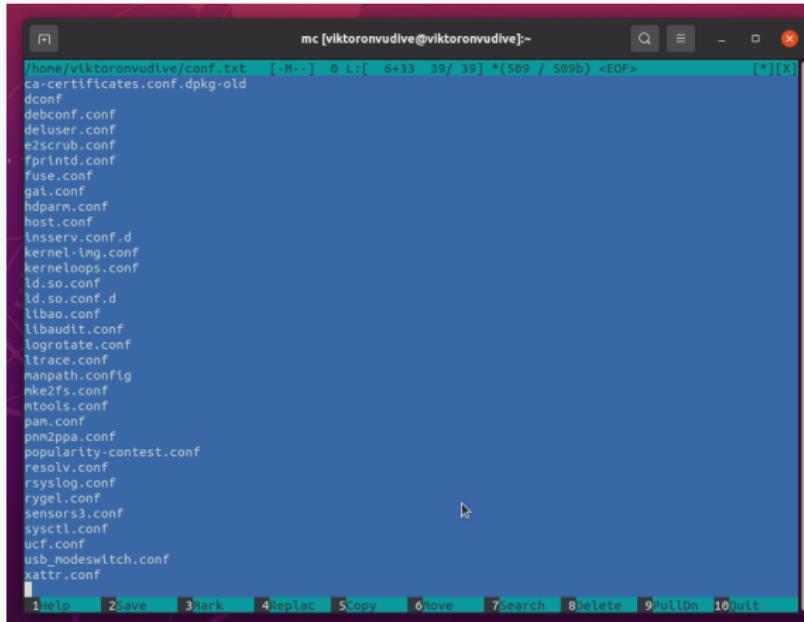


Рис. 31: Переход в конец файла

# Работа с редактором Midnight Commander

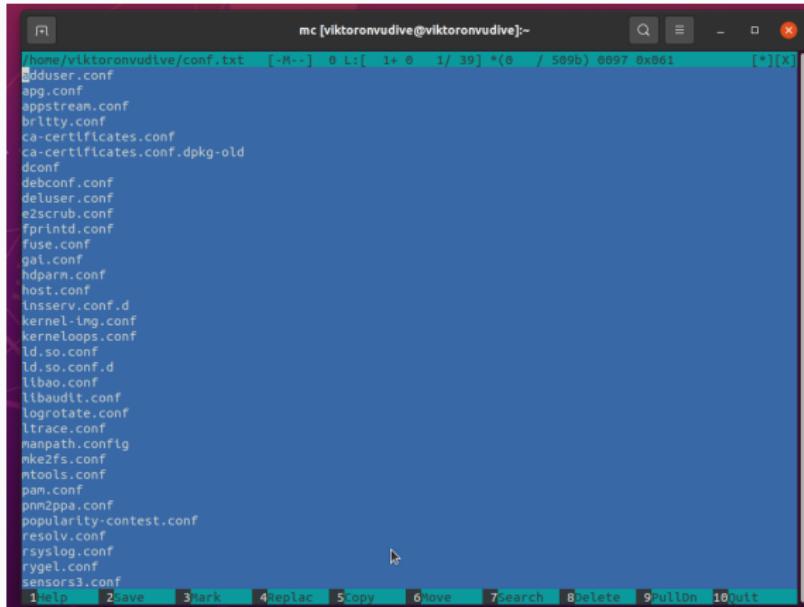
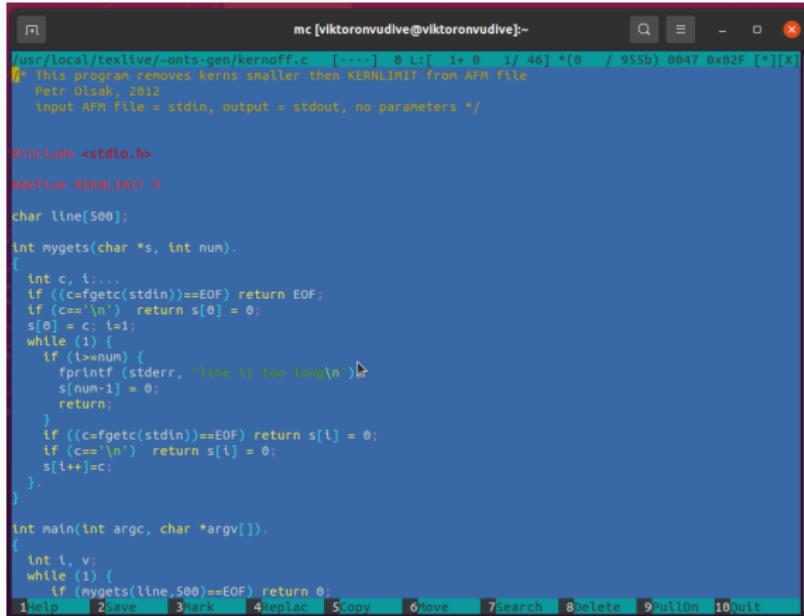


Рис. 32: Переход в начало файла

# Работа с редактором Midnight Commander



The screenshot shows a terminal window titled "mc [viktoronvudive@viktoronvudive]:" containing the source code of a C program named "kernoff.c". The code is a command-line utility that removes kernel modules smaller than KERNLIMIT from an AFM file. It includes error handling for EOF and invalid input, and a main loop that reads lines from standard input until EOF is reached.

```
/* This program removes kernels smaller than KERNLIMIT from AFM file
   Petr Olsak, 2012
   input AFM file = stdin, output = stdout, no parameters */

#include <stdio.h>

#define KERNLIMIT 9

char line[500];

int mygets(char *s, int num) {
    int c, i...
    if ((c=fgetc(stdin))==EOF) return EOF;
    if (c=='\n') return s[0] = 0;
    s[0] = c; i=1;
    while (1) {
        if (i>num) {
            fprintf(stderr, "line is too long\n");
            s[num-1] = 0;
            return;
        }
        if ((c=fgetc(stdin))==EOF) return s[i] = 0;
        if (c=='\n') return s[i] = 0;
        s[i++]=c;
    }
}

int main(int argc, char *argv[]) {
    int l, v;
    while (1) {
        if (mygets(line,500)==EOF) return 0;
        1 Help   2 Save  3 Mark  4 Replace  5 Copy   6 Paste  7 Search  8 Delete  9 Pullup  10 quit
    }
}
```

Рис. 33: Файл с программой

# Работа с редактором Midnight Commander

The screenshot shows a terminal window titled "mc [viktoronvudive@viktoronvudive]~". The command entered is:

```
/usr/local/texlive/~onts-gen/kernoff.c [~~~] 0 L:[ 3+ 0 1/ 46] *(0 / 955b) 0B47 0x02F [*][X]  
/* This program removes kerns smaller than KERNLIMIT from AFM file  
Petr Olsak, 2012  
Input AFM file = stdln, output = stdout, no parameters */
```

The code itself is:

```
#include <stdio.h>  
  
#define KERNLIMIT 9  
  
char line[500];  
  
int mygets(char *s, int num)  
{  
    int c, i...  
    if ((c=fgetc(stdin))==EOF)  
    if (c=='\n') return s[0]  
    s[0] = c; i=1;  
    while (1)  
    {  
        if (i>num) {  
            fprintf (stderr, "%s",  
            s[num-1] = 0;  
            return;  
        }  
        if ((c=fgetc(stdin))==EOF)  
        if (c=='\n') return s[i] = 0;  
        s[i++]=c;  
    }  
}  
  
int main(int argc, char *argv[]){  
    int i, v;  
    while (1) {  
        if (mygets(line,500)==EOF) return 0;
```

A context menu is open over the code, titled "Choose syntax highlighting". It lists various programming languages and file types, with "C Program" currently selected.

At the bottom of the terminal window, there is a menu bar with the following items: Help, Save, Mark, Replace, Copy, Delete, Search, Belete, PullDown, and Quit.

Рис. 34: Цветовыделение синтаксиса

## **Выводы по проделанной работе**

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# Вывод

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В данной работе мы ознакомились с инструментами поиска файлов и фильтрации текстовых данных. А также приобрели практические навыки по управлению процессами.