

Командная оболочка Midnight Commander

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Цели и задачи работы

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

Работа с Midnight Commander

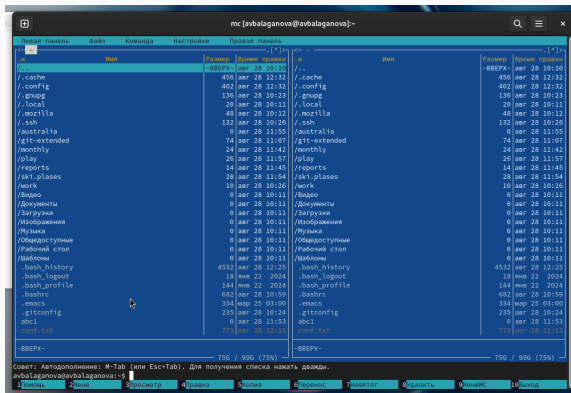


Рис. 1: Запуск mc

Работа с Midnight Commander

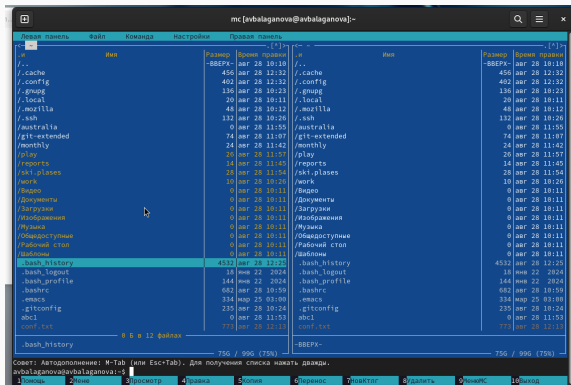


Рис. 2: Выделение

Работа с Midnight Commander

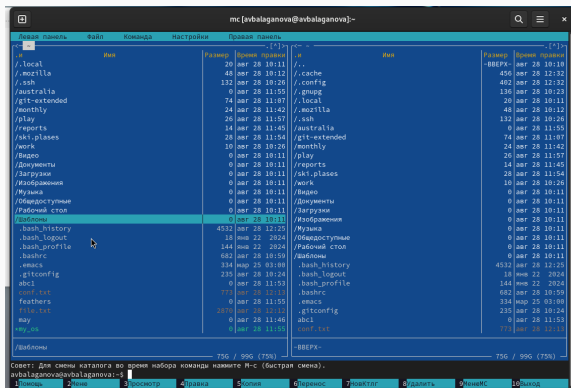


Рис. 3: Отмена

Работа с Midnight Commander

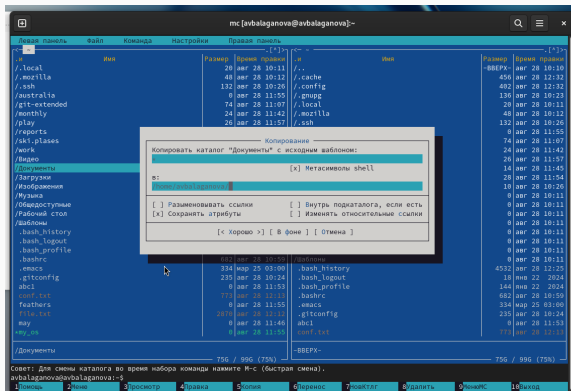


Рис. 4: Копирование

Работа с Midnight Commander

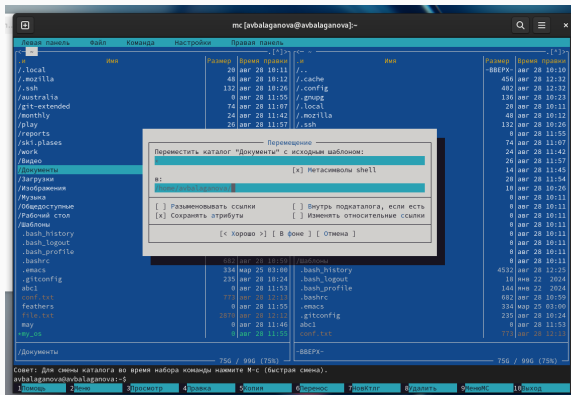


Рис. 5: Перемещение

Работа с Midnight Commander

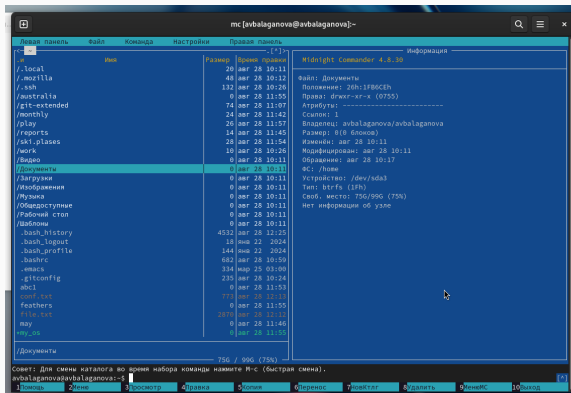


Рис. 6: Информация

Работа с Midnight Commander

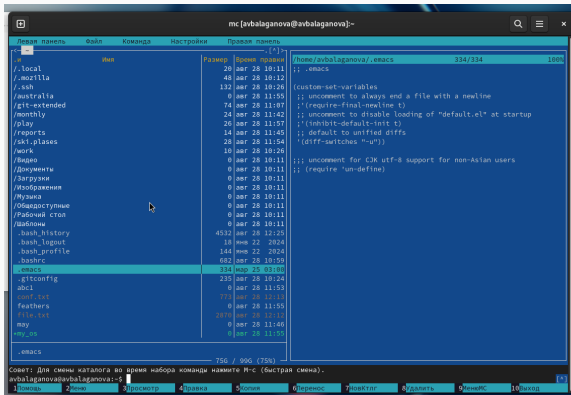


Рис. 7: Быстрый просмотр

Работа с Midnight Commander

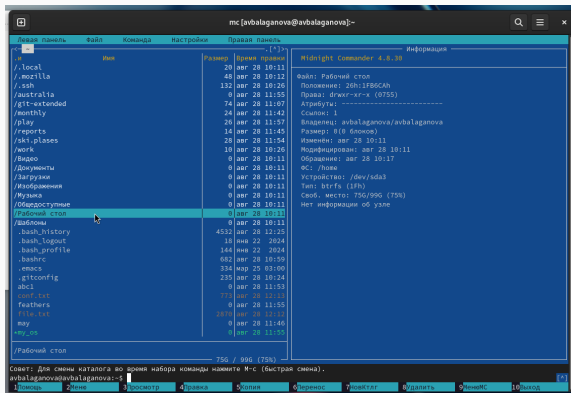


Рис. 8: Информация

Работа с Midnight Commander

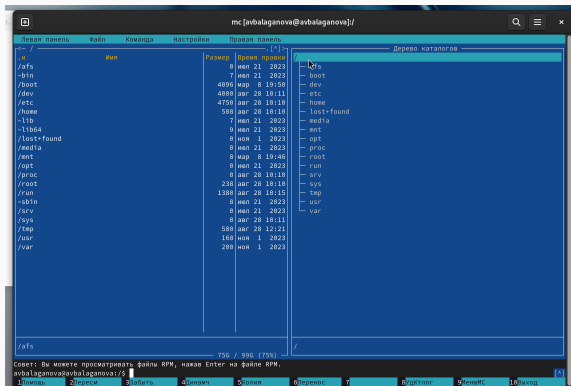


Рис. 9: Дерево каталогов

Работа с Midnight Commander

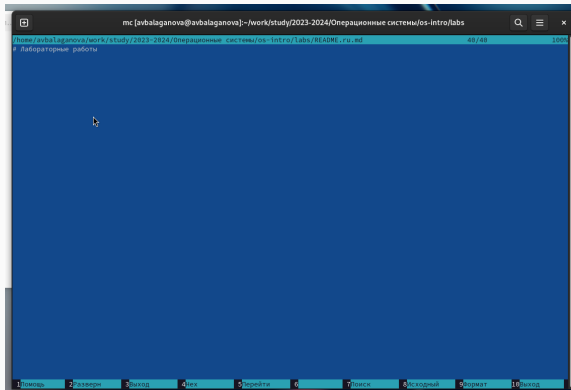


Рис. 10: Просмотр содержимого текстового файла

Работа с Midnight Commander

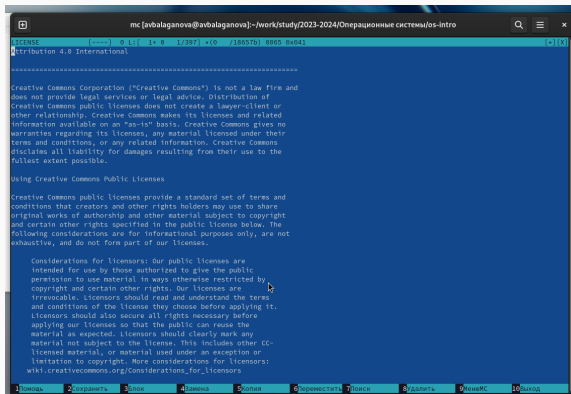


Рис. 11: Отредактируем содержимое текстового файла без сохранения результатов

Работа с Midnight Commander

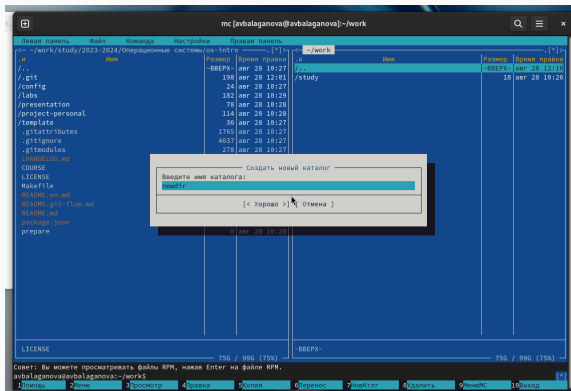


Рис. 12: Создание каталога

Работа с Midnight Commander

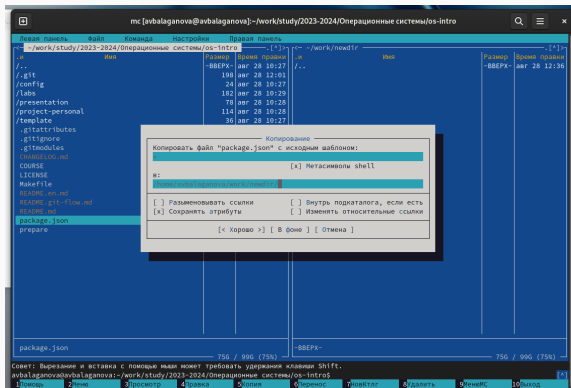


Рис. 13: Копирование в файлов в созданный каталог

Работа с Midnight Commander

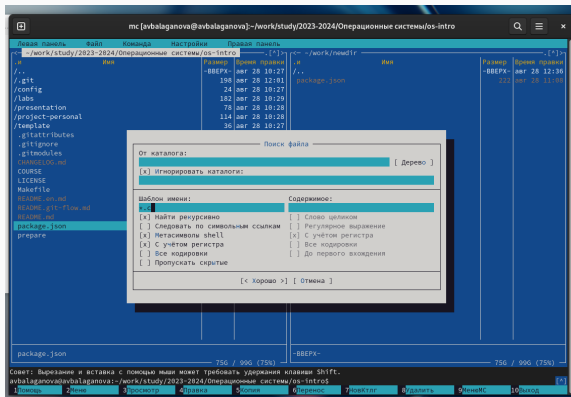


Рис. 14: Поиск файлов

Работа с Midnight Commander

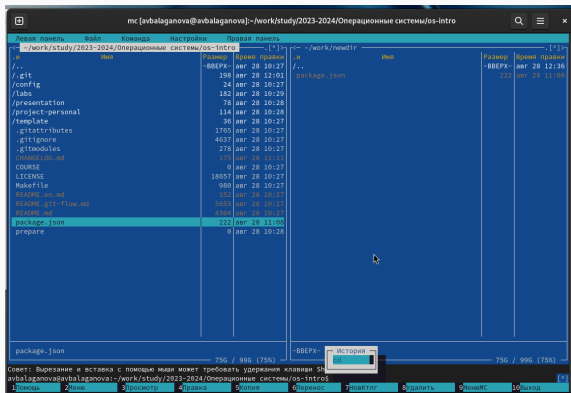


Рис. 15: История команд

Работа с Midnight Commander

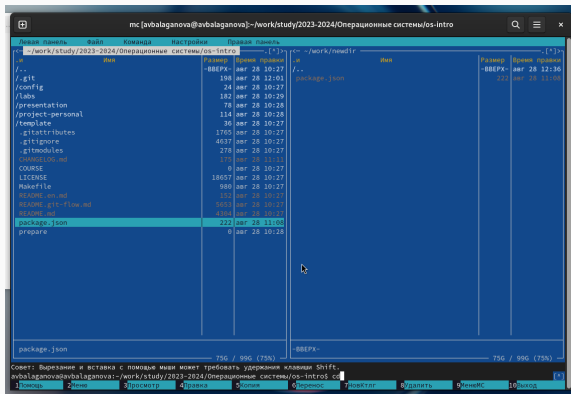


Рис. 16: Переход в домашний каталог

Работа с Midnight Commander

```
mc.ext.ini [-----] 0 L: [ 1+ 0 1/1136] *0 /26909b/0035 0x023 [*][X]
# Midnight Commander 4.8 extension file
#
# Warning: The structure of this file has been completely changed with the version 4.0!
#
# All lines starting with # or empty lines are ignored.
#
# IMPORTANT: mc scans this file only upon first use or after editing it using the
# mc "Edit extension file" command (F8-c-e). If you edit this file in any other way
# while mc is running, you will need to press F8-c-e and exit the editor for your
# changes to take effect, or exit mc and start it again.
#
# Section name can be anything with following exceptions:
#   there are two reserved section names:
#       mc.ext.ini
#       Default
#   special name pattern:
#       Include/xxxx
#   See below for more details.
#
# Section [mc.ext.ini] is mandatory. It contains file metadata.
# "Version" parameter is mandatory. It contains the file format version.
#
# Section [Default] is optional. It is applied only if no other match was found.
#
# Sections like [Include/xxxx] can be referenced as "Include=xxxx" from other sections.
# Section [Include/xxxx] can be located as before as after sections that point to it.
#
# Sections are processed from top to bottom, thus the order is important.
# If there are more than one sections with the same name in this file, the first
# section will be used.
#
# [Default] should be a catch-all action and come last.
#
```

Рис. 17: Просмотр файла расширений

Работа с Midnight Commander

A screenshot of the Midnight Commander file menu. The window title is "menu" with a status bar at the bottom showing "1: Помощь 2: Сохранить 3: Поиск 4: Имена 5: Скопия 6: Перенести 7: Повтор 8: Удалить 9: НенавС 10: Выход". The menu content includes options like "shell_patterns=0", "#####", "F The % character", "f The current file", "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)", "v view Runs the commands and pipes standard output to the view command", "If vview 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", "f ditto", "f 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".

```
menu [-----] 1 t: 1*16 17/378 *(732 /11821b) 0010 0x00A [x]
shell_patterns=0

#####
# F% 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)
# v view Runs the commands and pipes standard output to the view command
# If vview 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
# %f ditto
# %f don't quote expanded macro
#####

+ t t
0 Do something on the current file
CMD=:(Enter command)
SCMD f

+ t t
0 Do something on the tagged files
CMD=:(Enter command)
for i in $t ; do
```

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



Рис. 22: Подтверждение



Рис. 23: Оформление



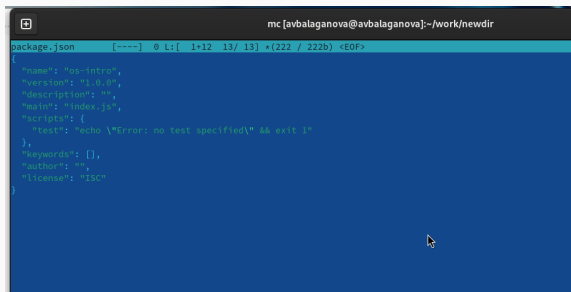
Рис. 24: Кодировка символов

Работа с Midnight Commander



Рис. 25: Распознавание клавиш

Работа с редактором Midnight Commander

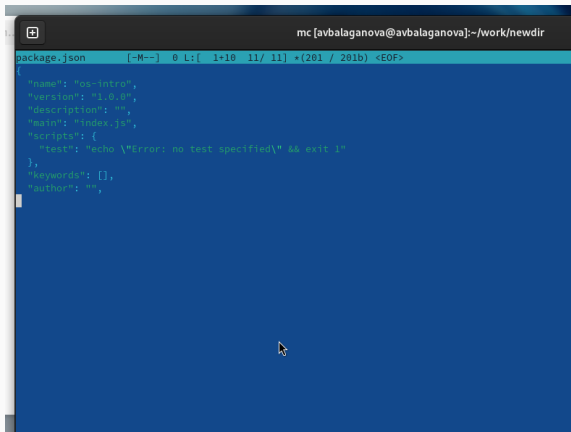


The screenshot shows the Midnight Commander (mc) file editor interface. The title bar at the top indicates the user is 'mc [avbalaganova@avbalaganova]:~/work/newdir'. The status bar at the bottom shows 'package.json' and file statistics: '[----] 0 L: [1+12 13/ 13] *(222 / 222b) <EOF>'. The main editing area has a dark blue background and displays the following JSON content:

```
{  
  "name": "os-intro",  
  "version": "1.0.0",  
  "description": "",  
  "main": "index.js",  
  "scripts": {  
    "test": "echo \\\"Error: no test specified\\\" && exit 1"  
  },  
  "keywords": [],  
  "author": "",  
  "license": "ISC"  
}
```

Рис. 26: Файл с текстом

Работа с редактором Midnight Commander

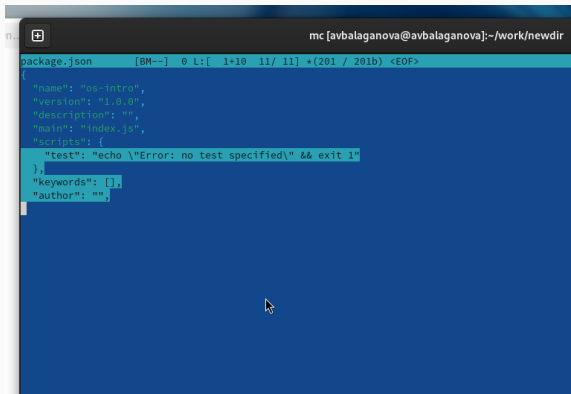


The image shows a screenshot of the Midnight Commander (MC) file manager. The title bar at the top indicates the user is 'mc [avbalaganova@avbalaganova]:~/work/newdir'. The main window displays the contents of a file named 'package.json'. The file's metadata is shown in a light blue header: 'package.json [-M--] 0 L: [1+10 11/ 11] *(201 / 201b) <EOF>'. The file content is a JSON object with the following fields: 'name' (os-intro), 'version' (1.0.0), 'description' (empty), 'main' (index.js), 'scripts' (a test script that echoes an error message and exits with code 1), 'keywords' (an empty array), and 'author' (empty). A mouse cursor is visible at the bottom center of the editor window.

```
package.json  [-M--] 0 L: [ 1+10 11/ 11] *(201 / 201b) <EOF>
{
  "name": "os-intro",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \\\"Error: no test specified\\\" && exit 1"
  },
  "keywords": [],
  "author": ""
}
```

Рис. 27: Файл с текстом

Работа с редактором Midnight Commander



The screenshot shows the Midnight Commander (mc) interface. The title bar indicates the user is 'avbalaganova@avbalaganova' in the directory '/work/newdir'. The file being edited is 'package.json'. The editor shows the following JSON content:

```
[BM--] 0 L:[ 1+10 11/ 11] *(201 / 201b) <EOF>
{
  "name": "ps-intro",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": ""
}
```

The line containing the test script is highlighted in light blue. A mouse cursor is visible in the lower right area of the editor window.

Рис. 28: Копирование фрагмента

Работа с редактором Midnight Commander

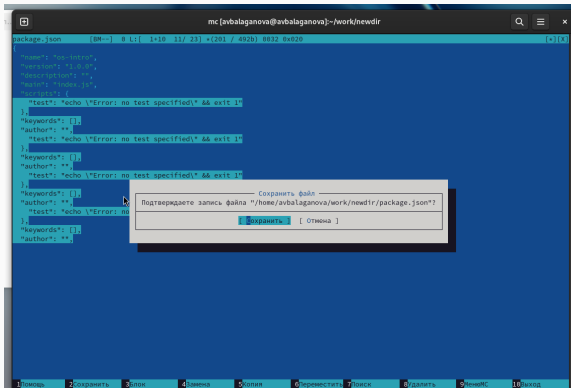


Рис. 29: Сохранение

Работа с редактором Midnight Commander

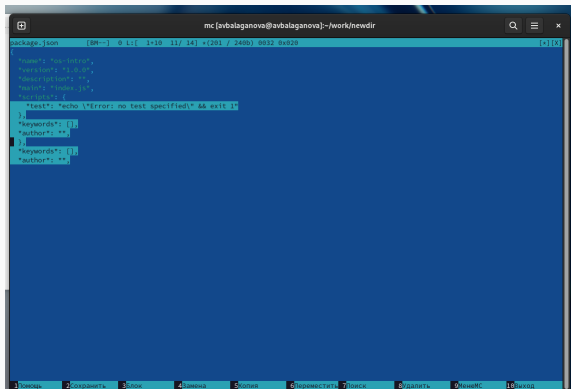


Рис. 30: Отмена

Работа с редактором Midnight Commander

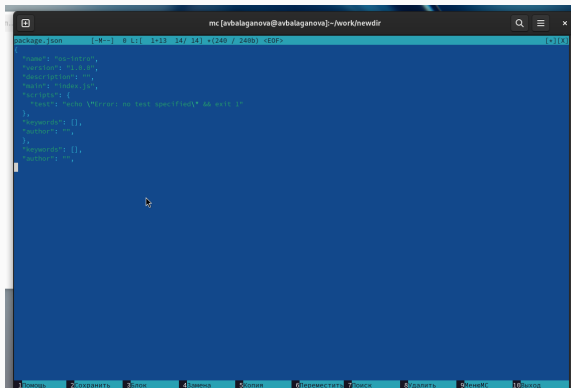


Рис. 31: Переход в конец файла

Работа с редактором Midnight Commander

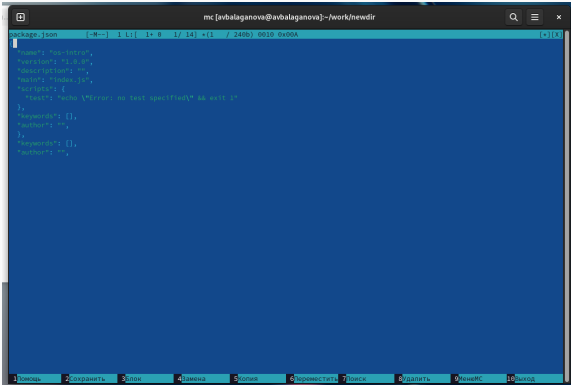
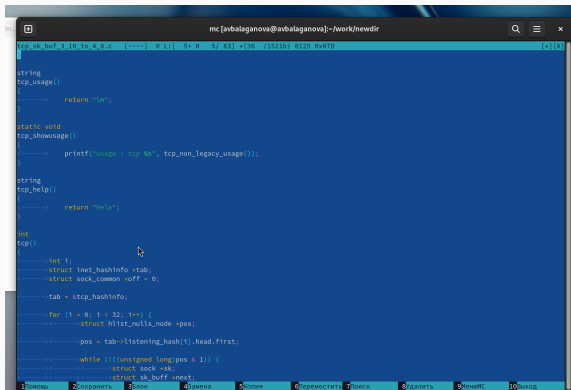


Рис. 32: Переход в начало файла

Работа с редактором Midnight Commander



The screenshot shows the Midnight Commander (mc) file editor interface. The title bar indicates the user is 'avbalaganova' at 'avbalaganova' in the directory '~/work/newdir'. The editor displays a C program with the following code:

```
tcp_sk_buf_3.10.to.4.8.c  (-----)  0 1: 5+ 0 5/ 83) +(36 /1521b) 0125 0x07D  (= |x|)

string
tcp_usage()
{
    -----> return "\n";
}

static void
tcp_showusage()
{
    -----> printf("usage : tcp %s", tcp_non_legacy_usage());
}

string
tcp_help()
{
    -----> return "help";
}

int
tcp()
{
    -----> int i;
    -----> struct inet_hashinfo *tab;
    -----> struct sock_common *off = 0;

    -----> tab = &tcp_hashinfo;

    -----> for (i = 0; i < 32; i++) {
    -----> struct hlist_nulls_node *pos;

    -----> pos = tab->listening_hash[i].head.first;
    -----> while (((unsigned long)pos & 1)) {
    -----> struct sock *sk;
    -----> struct sk_buff *next;
    -----> struct sk_buff *next;
```

The bottom of the window shows a tab bar with the following tabs: 1) main, 2) tcp_usage, 3) tcp, 4) avbalaganova, 5) main, 6) tcp_usage, 7) tcp, 8) tcp_usage, 9) newdir, 10) tcp_usage.

Рис. 33: Файл с программой

Работа с редактором Midnight Commander

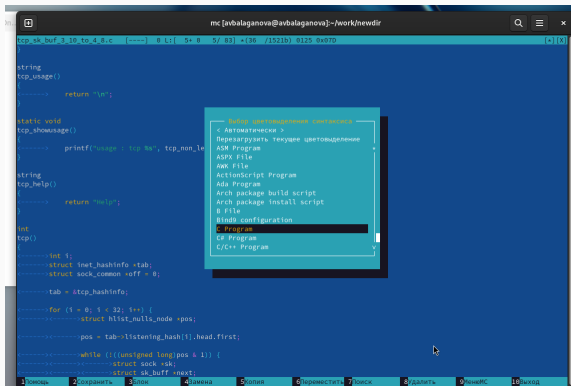


Рис. 34: Цветовыделение синтаксиса

Выводы по проделанной работе

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