

Командная оболочка Midnight Commander

Тимур Акмурадов¹

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¹Российский Университет Дружбы Народов

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

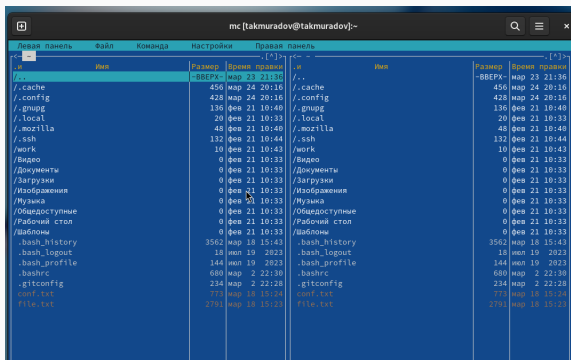


Рис. 1: Запуск mc

Работа с Midnight Commander

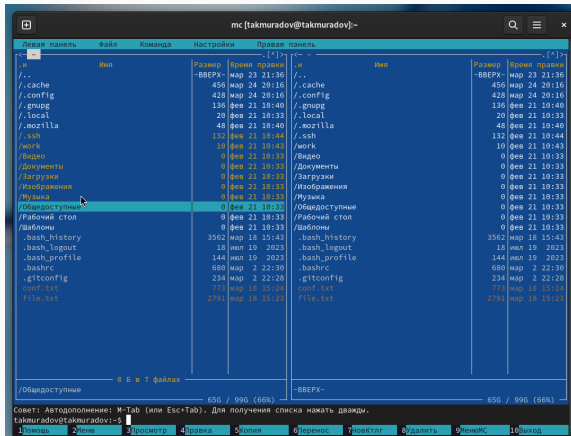


Рис. 2: Выделение

Работа с Midnight Commander

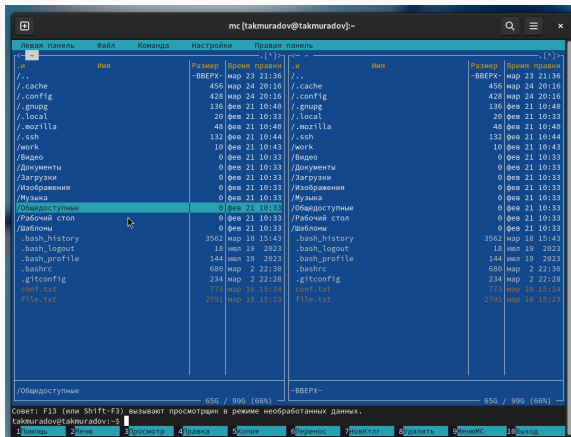


Рис. 3: Отмена

Работа с Midnight Commander

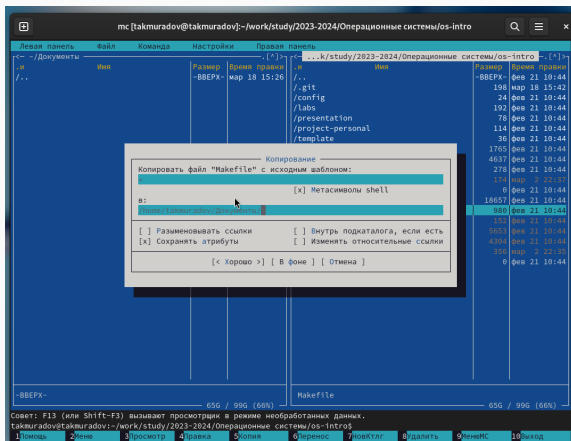


Рис. 4: Копирование

Работа с Midnight Commander

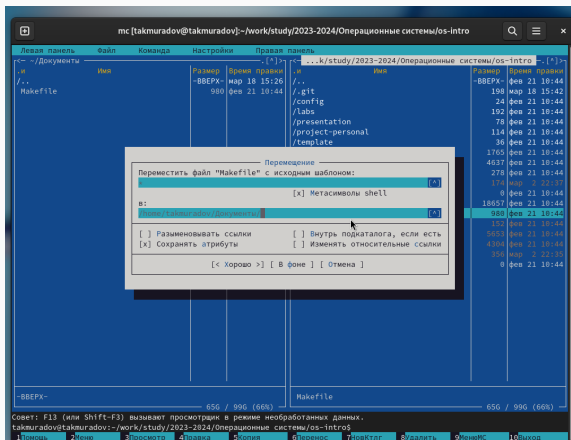


Рис. 5: Перемещение

Работа с Midnight Commander

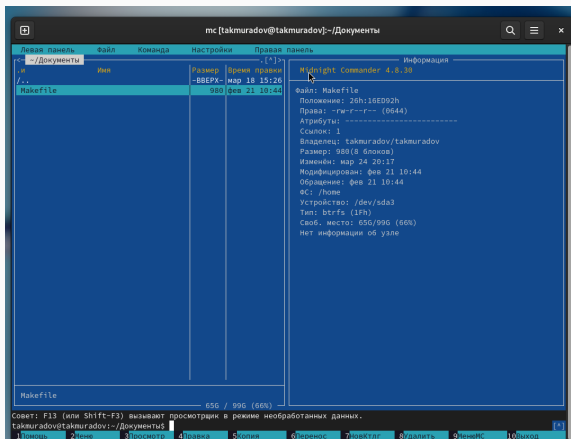


Рис. 6: Информация

Работа с Midnight Commander

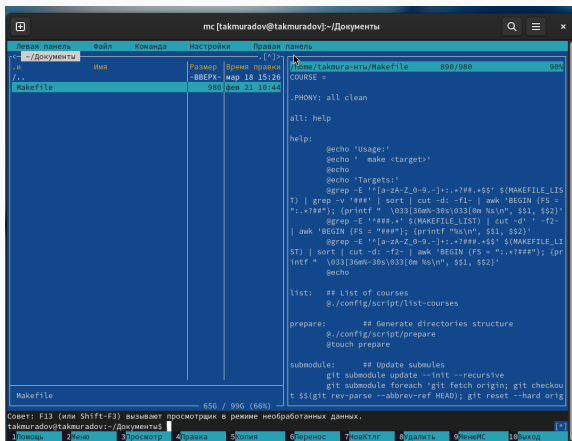


Рис. 7: Быстрый просмотр

Работа с Midnight Commander

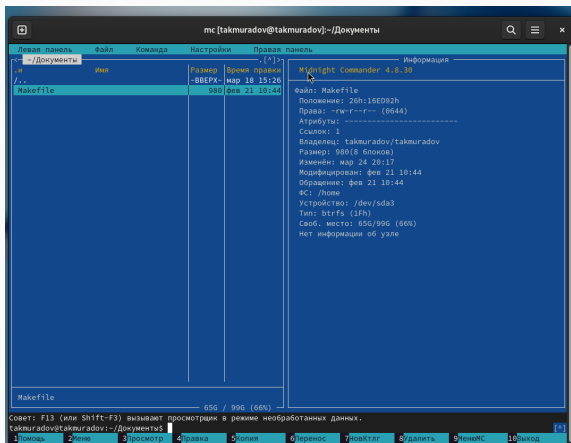


Рис. 8: Информация

Работа с Midnight Commander

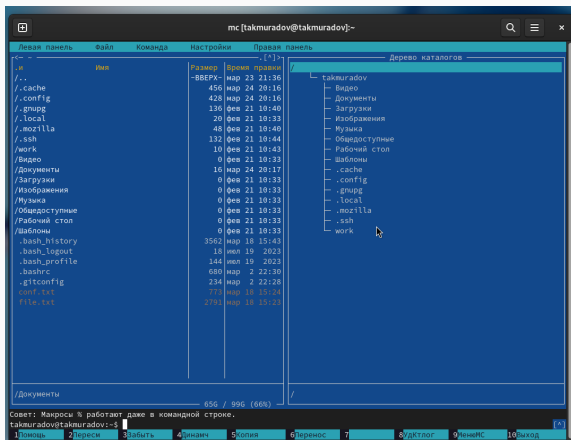
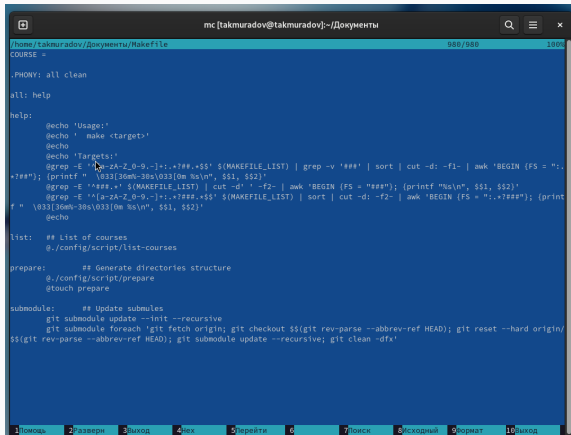


Рис. 9: Дерево каталогов

Работа с Midnight Commander



The screenshot shows the Midnight Commander (mc) interface. The title bar indicates the user is 'takhmuradov@takhmuradov' in the directory '~/.Документы'. The current directory is '/home/takhmuradov/Документы/Makefile', and the file size is 980/980 bytes, 100% loaded. The main window displays the contents of the Makefile, which includes a 'COURSE' variable, a 'phony' target for 'all clean', a 'help' target, and a 'list' target. The 'list' target calls a script 'list-courses'. The 'prepare' target calls a script 'prepare'. The 'submodule' target calls a script 'update-submodules'. The bottom status bar shows various icons and a list of files: '1.Помощь', '2.Назад', '3.Выход', '4.Лек', '5.Перейти', '6', '7.Поиск', '8.Свойства', '9.Формат', '10.Выход'.

```
mc [takhmuradov@takhmuradov:~/Документы]
/home/takhmuradov/Документы/Makefile 980/980 100%
COURSE =

.PHONY: all clean

all: help

help:
@echo 'Usage:'
@echo ' make <target>'
@echo
@echo 'Targets:'
@grep -E '[a-zA-Z_0-9-]+\.[7##]+$$' $(MAKEFILE_LIST) | grep -v '###' | sort | cut -d: -f1- | awk 'BEGIN {FS = ":\n"}; {print " \033[36m-\033[0m %s\n", $1, $2}'
@grep -E '^[7##]+.' $(MAKEFILE_LIST) | cut -d' ' -f2- | awk 'BEGIN {FS = "###"}; {print "%s\n", $1, $2}'
@grep -E '^[a-zA-Z_0-9-]+\.[7##]+$$' $(MAKEFILE_LIST) | sort | cut -d: -f2- | awk 'BEGIN {FS = ":\n"}; {print " \033[36m-\033[0m %s\n", $1, $2}'
@echo

list: ## List of courses
@./config/script/list-courses

prepare: ## Generate directories structure
@./config/script/prepare
@touch prepare

submodule: ## Update submodules
git submodule update --init --recursive
git submodule foreach 'git fetch origin; git checkout $(git rev-parse --abbrev-ref HEAD); git reset --hard origin/$(git rev-parse --abbrev-ref HEAD); git submodule update --recursive; git clean -dfx'
```

Рис. 10: Просмотр содержимого текстового файла

Работа с Midnight Commander

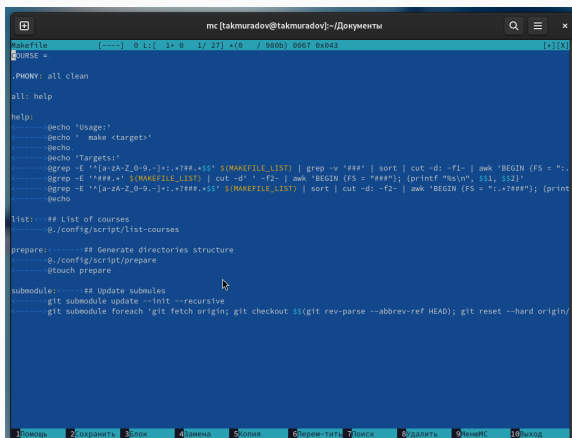


Рис. 11: Отредактируем содержимое текстового файла без сохранения результатов

Работа с Midnight Commander

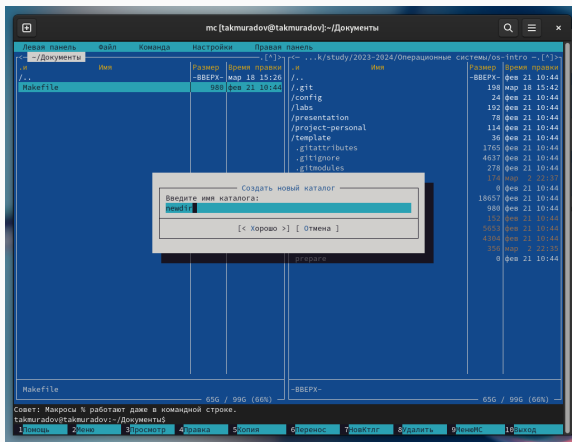


Рис. 12: Создание каталога

Работа с Midnight Commander

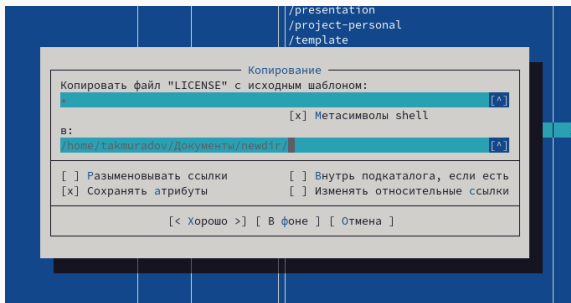


Рис. 13: Копирование в файлов в созданный каталог

Работа с Midnight Commander

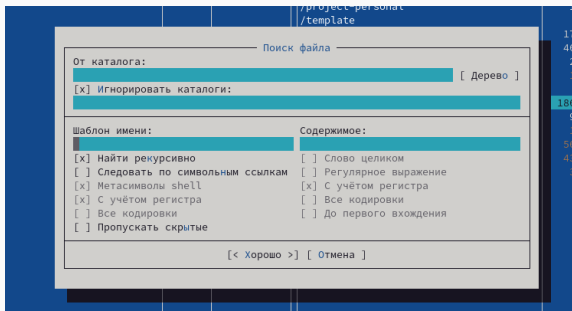


Рис. 14: Поиск файлов

Работа с Midnight Commander

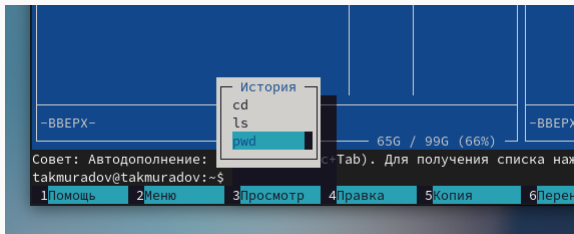


Рис. 15: История команд

Работа с Midnight Commander

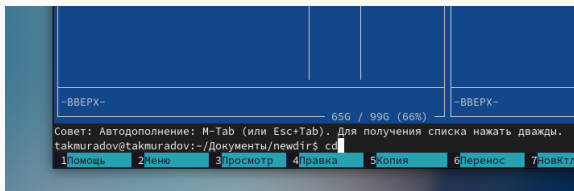


Рис. 16: Переход в домашний каталог

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", "#####", "% 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 %view is immediately followed by 'l', 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

#####
# % 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 %view is immediately followed by 'l', 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
```

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

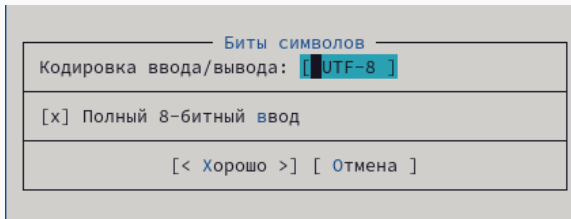


Рис. 24: Кодировка символов

Работа с Midnight Commander



Рис. 25: Распознавание клавиш

Работа с редактором Midnight Commander

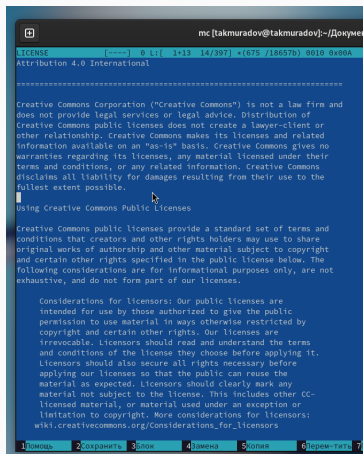


Рис. 26: Файл с текстом

Работа с редактором Midnight Commander

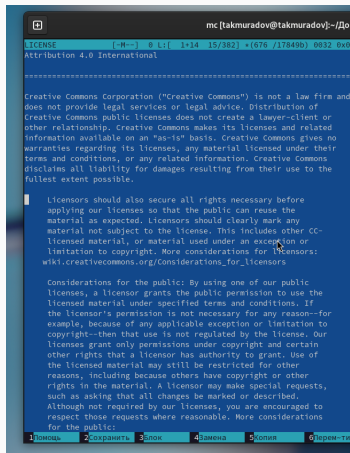


Рис. 27: Файл с текстом

Работа с редактором Midnight Commander

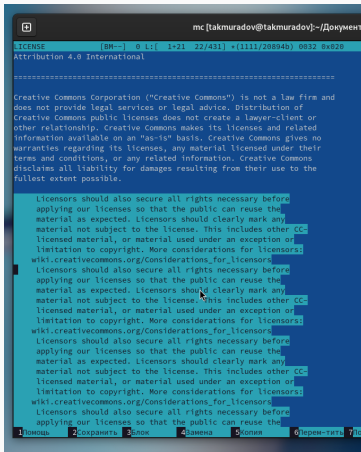


Рис. 28: Копирование фрагмента

Работа с редактором Midnight Commander

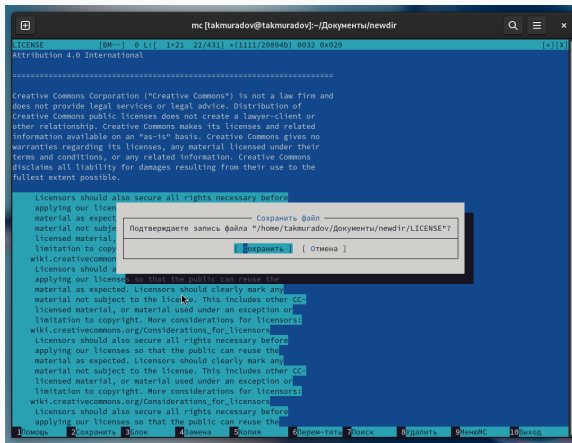
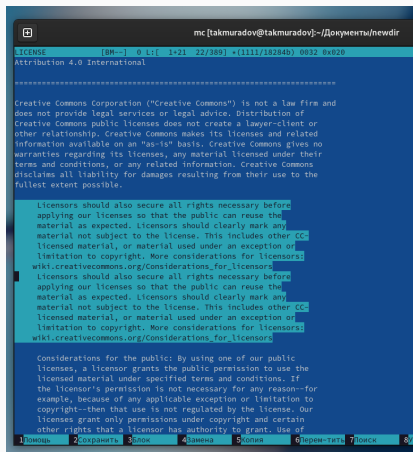


Рис. 29: Сохранение

Работа с редактором Midnight Commander



```
mc [takmuradov@takmuradov]~/Документы/newdir
LICENSE [BM--] 0 Li[ 1+21 22/389] +(1111/18284b) 0032 0x020
Attribution 4.0 International

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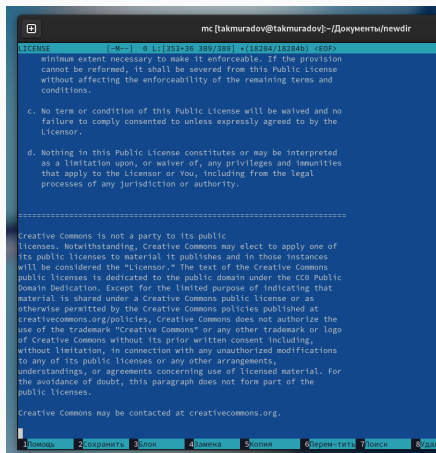
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1 Помощь 2 Сохранить 3 Блок 4 Вставка 5 Копия 6 Переместить 7 Поиск 8 Вы
```

Рис. 30: Отмена

Работа с редактором Midnight Commander



```
mc [takmuradov@takmuradov]~/Документы/newdir
[~M~] 0 L:[353+36 389/389] *(18284/18284b) <EOF>
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```

Рис. 31: Переход в конец файла

Работа с редактором Midnight Commander

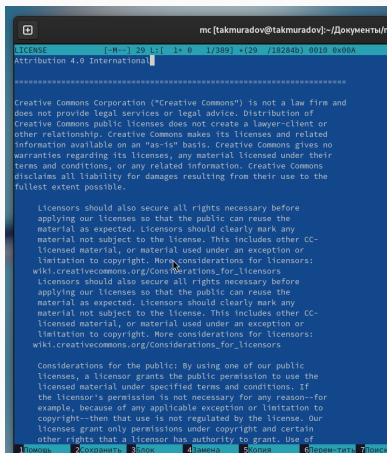


Рис. 32: Переход в начало файла

```
mc [takhmuradov@takhmuradov:~/Документы/newdir
tcp_sk_buf_3,10_to_4,8.c [----] 0 L; 21+ 0 21/ 83; *187 /1521b) 0123 0x078 (*)|X|
----- 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_head *head;
----->----->-----struct hlist_nulls_node *node;
----->----->-----sk = (struct sock *)((unsigned long)pos - (unsigned long)&(off->skc_dontcopy_begin));
----->----->-----head = (struct sk_buff_head *)&(sk->sk_receive_queue);
----->----->-----next = (struct sk_buff *)sk->sk_receive_queue.next;
----->----->-----while (next != head)
----->----->-----{
----->----->----->-----struct sk_buff *buff = (struct sk_buff *) next;
----->----->----->-----if (buff->data_len)
----->----->----->-----memset((char *)buff->data, '\0', buff->data_len);
----->----->----->-----memset((char *)buff->data_len, '\0', 0x4);
----->----->----->-----}
----->----->-----}
1Помочь 2Сохранить 3Вопрос 4Важно 5Юлия 6Ирина-Тит 7Ларис 8Удалить 9ЛенинС 10Выход
```

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Работа с редактором Midnight Commander

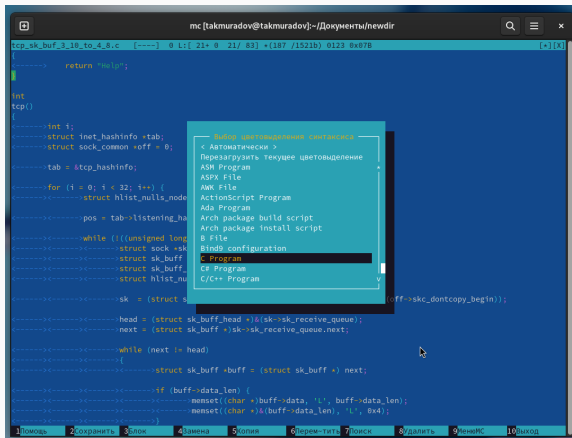


Рис. 34: Цветовыделение синтаксиса

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.