

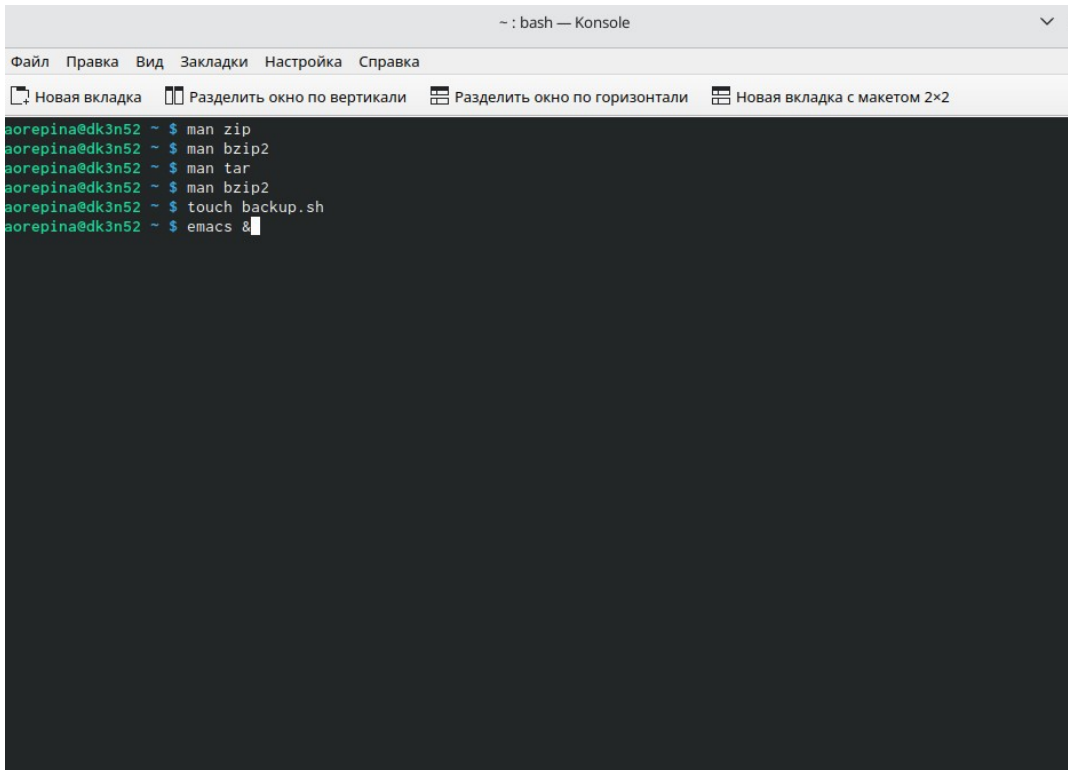
Лабораторная работа 10

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Отчет по лабораторной работе 10

Работа с консолью

Для начала я изучила команды архивации с помощью команды `man`



```
~ : bash — Konsole
Файл  Правка  Вид  Закладки  Настройка  Справка
+ Новая вкладка  + Разделить окно по вертикали  + Разделить окно по горизонтали  + Новая вкладка с макетом 2x2
aorepina@dk3n52 ~ $ man zip
aorepina@dk3n52 ~ $ man bzip2
aorepina@dk3n52 ~ $ man tar
aorepina@dk3n52 ~ $ man bzip2
aorepina@dk3n52 ~ $ touch backup.sh
aorepina@dk3n52 ~ $ emacs &
```

Архиватор zip

Синтаксис команды zip для архивации файла: zip [опции] [имя файла.zip] [файлы ил папки, которые будем архивировать] Синтаксис команды zip для разархивации файла: unzip [опции] [файл архива.zip] [файлы] -x [исключить] -d [папка]

```
~ : man — Konsole

Файл  Правка  Вид  Закладки  Настройка  Справка

Новая вкладка  Разделить окно по вертикали  Разделить окно по горизонтали  Новая вкладка с макетом 2x2  >> >>

ZIP(1L)                                                                 ZIP(1L)

NAME
    zip - package and compress (archive) files

SYNOPSIS
    zip [-aABcdDeEffghjklLmoqrRSTuvVwXyz!@&$] [--longoption ...] [-b path] [-n suffixes] [-t date] [-tt date]
    [zipfile [file ...]] [-xi list]

    zipcloak (see separate man page)

    zipnote (see separate man page)

    zipsplit (see separate man page)

Note: Command line processing in zip has been changed to support long options and handle all options and arguments more consistently. Some old command lines that depend on command line inconsistencies may no longer work.

DESCRIPTION
    zip is a compression and file packaging utility for Unix, VMS, MSDOS, OS/2, Windows 9x/NT/XP, Minix, Atari, Macintosh, Amiga, and Acorn RISC OS. It is analogous to a combination of the Unix commands tar(1) and compress(1) and is compatible with PKZIP (Phil Katz's ZIP for MSDOS systems).

    A companion program (unzip(1L)) unpacks zip archives. The zip and unzip(1L) programs can work with archives produced by PKZIP (supporting most PKZIP features up to PKZIP version 4.6), and PKZIP and PKUNZIP can work with archives produced by zip (with some exceptions, notably streamed archives, but recent changes in the zip file standard may facilitate better compatibility). zip version 3.0 is compatible with PKZIP 2.04 and also supports the Zip64 extensions of PKZIP 4.5 which allow archives as well as files to exceed the previous 2 GB limit (4 GB in some cases). zip also now supports bzip2 compression if the bzip2 library is included when zip is compiled. Note that PKUNZIP 1.10 cannot extract files produced by PKZIP 2.04 or zip 3.0. You must use PKUNZIP 2.04g or unzip 5.0p1 (or later versions) to extract them.

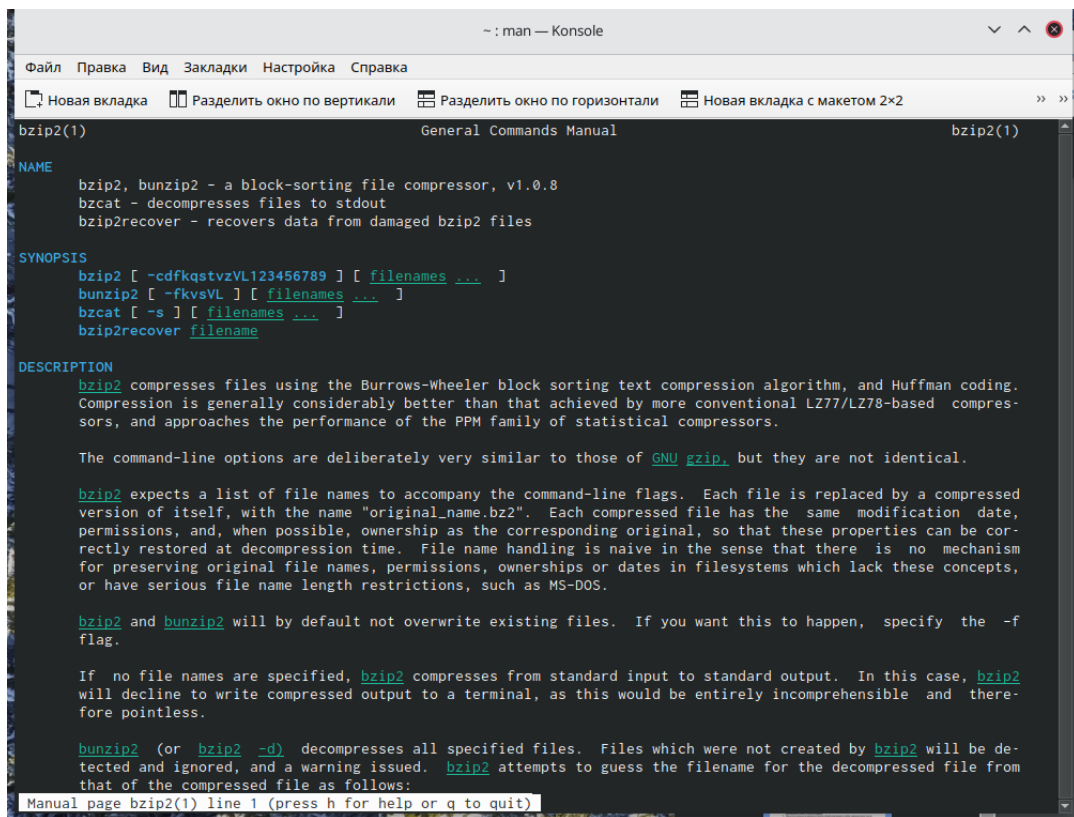
    See the EXAMPLES section at the bottom of this page for examples of some typical uses of zip.

    Large Archives and Zip64. zip automatically uses the Zip64 extensions when files larger than 4 GB are added to an archive, an archive containing Zip64 entries is updated (if the resulting archive still needs Zip64),

Manual page zip(1) line 1 (press h for help or q to quit)
```

Архиватор bzip2

Синтаксис bzip2 для архивации файла: bzip2
[опции][имена файлов] Синтаксис команды bzip2
для разархивации файла: bunzip2[опции]
[архивы.bz2]



```
~ : man — Konsole

Файл  Правка  Вид  Закладки  Настройка  Справка
[icon] Новая вкладка  [icon] Разделить окно по вертикали  [icon] Разделить окно по горизонтали  [icon] Новая вкладка с макетом 2x2  >> >>

bzip2(1)                                     General Commands Manual                                     bzip2(1)

NAME
bzip2, bunzip2 - a block-sorting file compressor, v1.0.8
bzipcat - decompresses files to stdout
bzip2recover - recovers data from damaged bzip2 files

SYNOPSIS
bzip2 [ -cdfkqstzVL123456789 ] [ filenames ... ]
bunzip2 [ -fkvsVL ] [ filenames ... ]
bzipcat [ -s ] [ filenames ... ]
bzip2recover filename

DESCRIPTION
bzip2 compresses files using the Burrows-Wheeler block sorting text compression algorithm, and Huffman coding. Compression is generally considerably better than that achieved by more conventional LZ77/LZ78-based compressors, and approaches the performance of the PPM family of statistical compressors.

The command-line options are deliberately very similar to those of GNU gzip, but they are not identical.

bzip2 expects a list of file names to accompany the command-line flags. Each file is replaced by a compressed version of itself, with the name "original_name.bz2". Each compressed file has the same modification date, permissions, and, when possible, ownership as the corresponding original, so that these properties can be correctly restored at decompression time. File name handling is naive in the sense that there is no mechanism for preserving original file names, permissions, ownerships or dates in filesystems which lack these concepts, or have serious file name length restrictions, such as MS-DOS.

bzip2 and bunzip2 will by default not overwrite existing files. If you want this to happen, specify the -f flag.

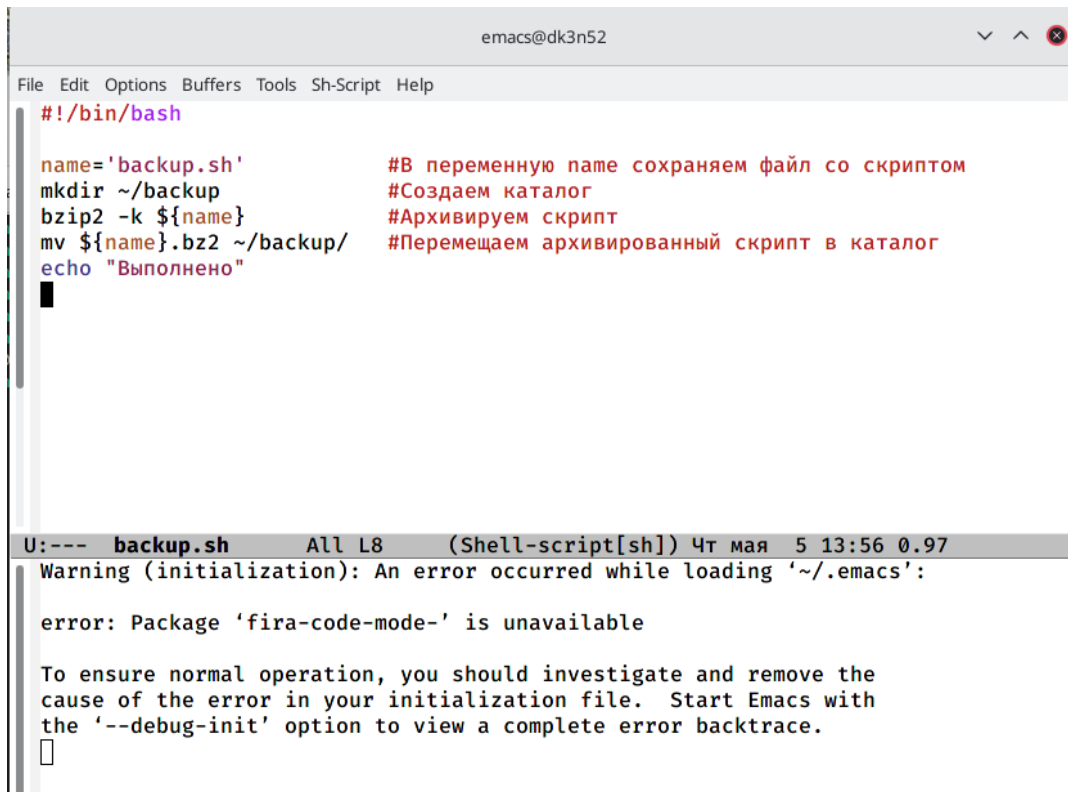
If no file names are specified, bzip2 compresses from standard input to standard output. In this case, bzip2 will decline to write compressed output to a terminal, as this would be entirely incomprehensible and therefore pointless.

bunzip2 (or bzip2 -d) decompresses all specified files. Files which were not created by bzip2 will be detected and ignored, and a warning issued. bzip2 attempts to guess the filename for the decompressed file from that of the compressed file as follows:

Manual page bzip2(1) line 1 (press h for help or q to quit)
```

Скрипт 1

Скрип, при запуске делающий копию самого себя



```
emacs@dk3n52
File Edit Options Buffers Tools Sh-Script Help
#!/bin/bash
name='backup.sh'           #В переменную name сохраняем файл со скриптом
mkdir ~/backup             #Создаем каталог
bzip2 -k ${name}           #Архивируем скрипт
mv ${name}.bz2 ~/backup/   #Перемещаем архивированный скрипт в каталог
echo "Выполнено"
█

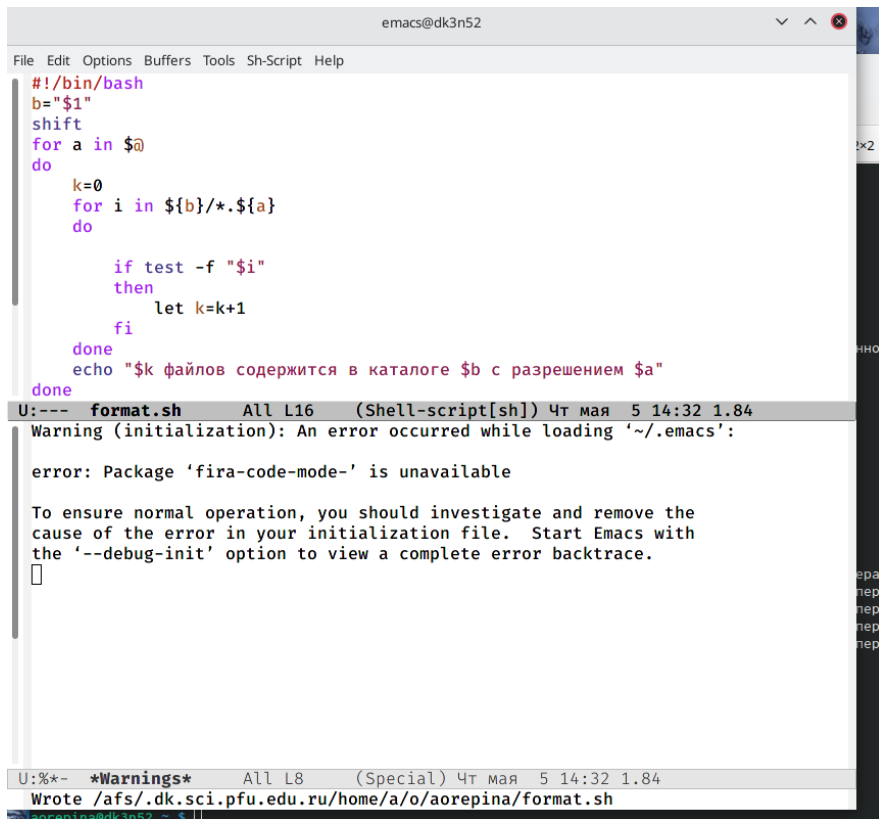
U:--- backup.sh All L8 (Shell-script[sh]) Чт мая 5 13:56 0.97
Warning (initialization): An error occurred while loading '~/.emacs':

error: Package 'fira-code-mode-' is unavailable

To ensure normal operation, you should investigate and remove the
cause of the error in your initialization file. Start Emacs with
the '--debug-init' option to view a complete error backtrace.
█
```

Скрипт 4

Написала командный файл, получающий в качестве аргумента командной строки формат файла



The screenshot shows an Emacs editor window titled 'emacs@dk3n52'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The main text area contains a shell script named 'format.sh' with the following content:

```
#!/bin/bash
b="$1"
shift
for a in $@
do
    k=0
    for i in ${b}/*.${a}
    do
        if test -f "$i"
        then
            let k=k+1
        fi
    done
    echo "$k файлов содержится в каталоге $b с разрешением $a"
done
```

Below the script, the output of running 'format.sh' is shown in a buffer named 'format.sh'. The output includes a warning and an error message:

```
U:--- format.sh All L16 (Shell-script[sh]) Чт мая 5 14:32 1.84
Warning (initialization): An error occurred while loading '~/.emacs':

error: Package 'fira-code-mode-' is unavailable

To ensure normal operation, you should investigate and remove the
cause of the error in your initialization file. Start Emacs with
the '--debug-init' option to view a complete error backtrace.
[]
```

At the bottom, a status bar shows the buffer 'U:%*- *Warnings*' and the file path '/afs/.dk.sci.pfu.edu.ru/home/a/o/aorepina/format.sh'.

Выводы

В ходе выполнения данной лабораторной работы я изучила основы программирования в оболочке Linux и получила практические навыки по написанию небольших командных файлов