

Редактор Emacs

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Цели и задачи работы

Цель лабораторной работы

Познакомиться с операционной системой Linux. Получить практические навыки работы с редактором Emacs.

1 Изучить возможности редактора Emacs

Процесс выполнения лабораторной работы

Выполнение работы

1. Откроем Emacs.

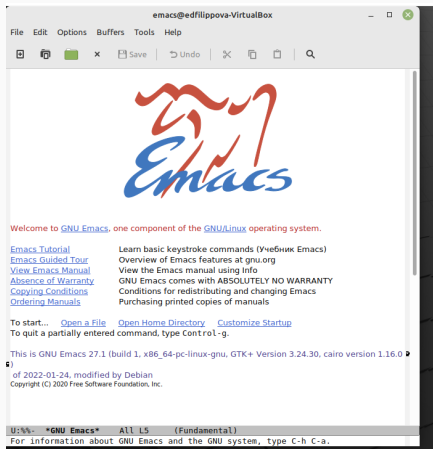
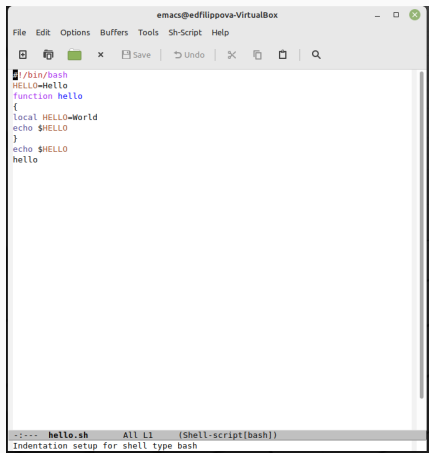


Figure 1: Запуск Emacs

Выполнение работы



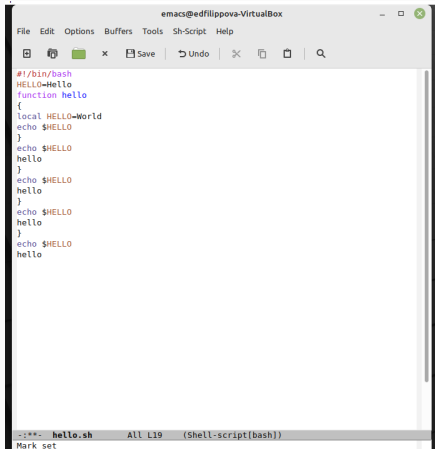
The screenshot shows the Emacs editor interface within a VirtualBox window titled 'emacs@edfilippova-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for file operations and editing. The main text area displays the following shell script code:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
```

The status bar at the bottom indicates the current file is 'hello.sh', the cursor is at line 11, and the buffer is '(Shell-script(bash))'. It also shows 'Indentation setup for shell type bash'.

Figure 2: Новый файл

Выполнение работы



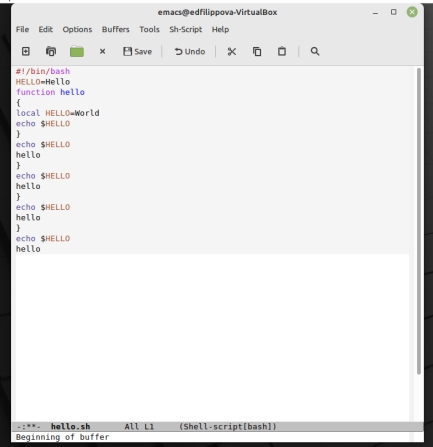
The screenshot shows the Emacs editor window titled 'emacs@edfilippova-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for opening files, saving, undo, redo, and search. The main text area displays a shell script with the following content:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
```

The status bar at the bottom indicates the current file is 'hello.sh', the cursor is at line 19, and the buffer is '(Shell-script(bash))'. The text 'Mark set' is also visible.

Figure 3: Операция вставка

Выполнение работы

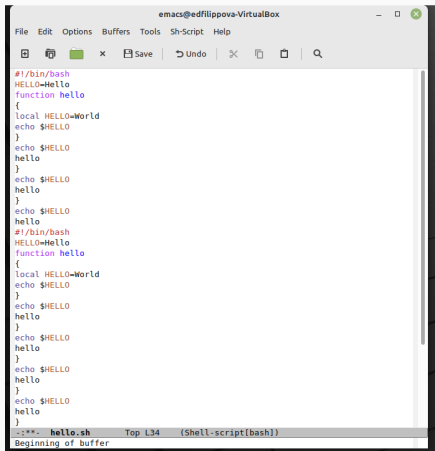
A screenshot of the Emacs editor window titled 'emacs@edfilippova-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar shows icons for file operations and editing. The main text area contains a shell script with the following content:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
```

The block of code from the function definition to the end of the script is highlighted in light blue. The status bar at the bottom shows ' -*- hello.sh All L1 (Shell-script(bash))' and 'Beginning of buffer'.

Figure 4: Выделение блока

Выполнение работы



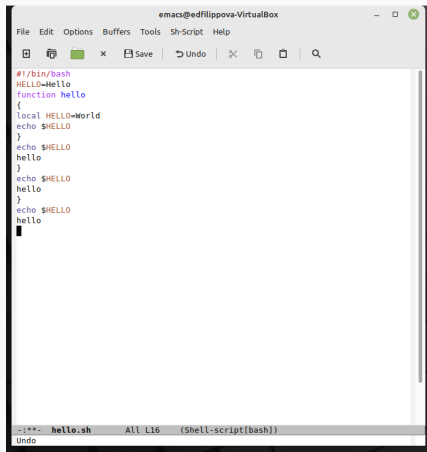
The screenshot shows an Emacs editor window titled "emacs@edfilippova-VirtualBox". The menu bar includes "File", "Edit", "Options", "Buffers", "Tools", "Sh-Script", and "Help". The toolbar contains icons for file operations and editing. The main text area displays a shell script with the following content:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
}

--*- hello.sh Top L34 (Shell-script[bash])
Beginning of buffer
```

Figure 5: Копирование блока

Выполнение работы



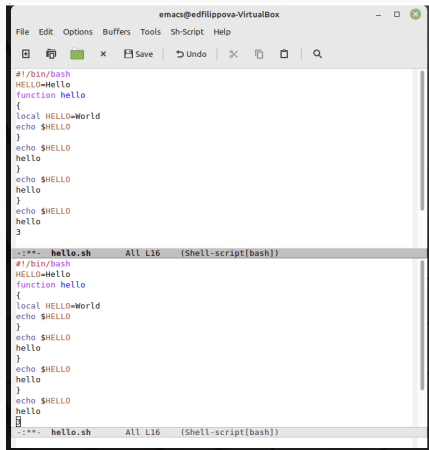
The screenshot shows the Emacs editor interface within a VirtualBox window titled 'emacs@edfilippova-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for file operations and editing. The main text area displays a shell script with the following content:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
```

The status bar at the bottom indicates the current buffer is 'hello.sh', the cursor is at 'All L16', and the file type is '(Shell-script(bash))'. The 'Undo' command is also visible in the status bar.

Figure 6: Удаление блока

Выполнение работы



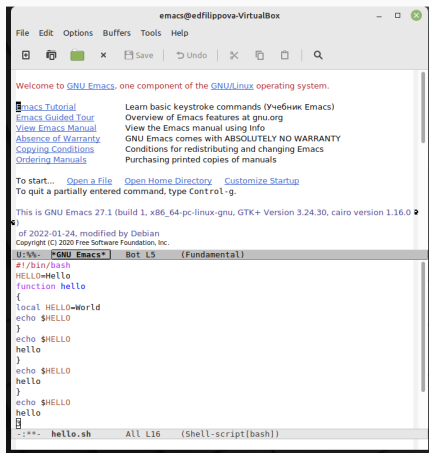
The image shows the Emacs editor interface with two windows displaying the same shell script. The top window is titled 'emacs@edfilippova-VirtualBox' and the bottom window is titled 'hello.sh'. Both windows show the following code:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
3
```

The bottom window also shows the command prompt ':-*- hello.sh All L16 (Shell-script(bash))' and a cursor at the end of the script.

Figure 7: Горизонтальное разделение

Выполнение работы



```
emacs@edfilippova-VirtualBox
File Edit Options Buffers Tools Help

Welcome to GNU Emacs, one component of the GNU/Linux operating system.

Emacs Tutorial      Learn basic keystroke commands (Учебник Emacs)
Emacs Guided Tour  Overview of Emacs features at gnu.org
View Emacs Manual  View the Emacs manual using Info
Absence of Warranty GNU Emacs comes with ABSOLUTELY NO WARRANTY
Copying Conditions Conditions for redistributing and changing Emacs
Ordering Manuals   Purchasing printed copies of manuals

To start... Open a File Open Home Directory Customize Startup
To quit a partially entered command, type Control-g.

This is GNU Emacs 27.1 (build 1, x86_64-pc-linux-gnu, GTK+ Version 3.24.30, cairo version 1.16.0
)
of 2022-01-24, modified by Debian
Copyright (C) 2020 Free Software Foundation, Inc.

GNU Emacs*  Bot L5  (Fundamental)

#i/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
-:*** hello.sh  All L16  (Shell-script{bash})
```

Figure 8: Переключение буфера

Выполнение работы

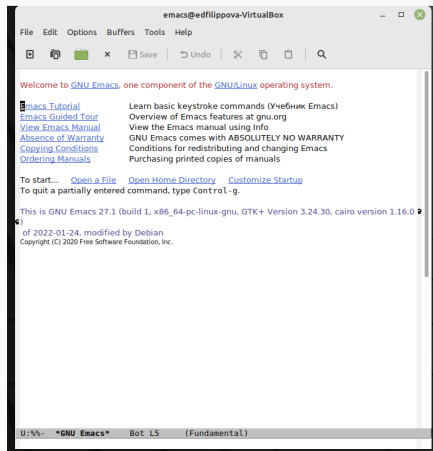
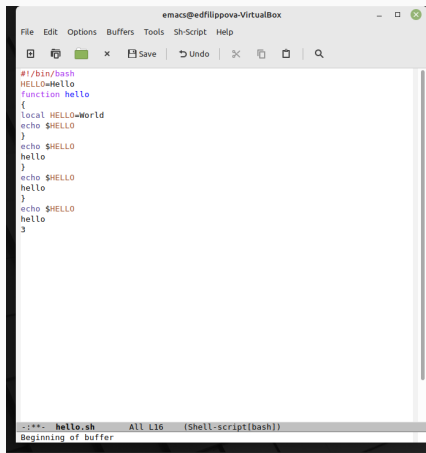


Figure 9: Закроем буфер

Выполнение работы

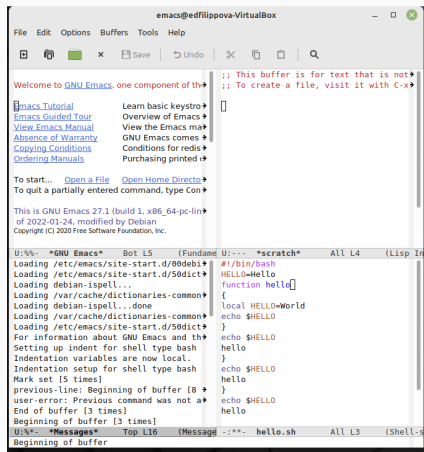
The image shows a screenshot of the Emacs text editor running inside a VirtualBox environment. The window title is 'emacs@edfilippova-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar shows icons for file operations and editing. The main text area contains a shell script with the following content:

```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
}
echo $HELLO
hello
}
echo $HELLO
hello
}
}
```

The status bar at the bottom of the window displays ' -*- hello.sh All L16 (Shell-script(bash))' and 'Beginning of buffer'.

Figure 10: Переключение буфера

Выполнение работы



The screenshot shows the Emacs editor interface with four buffers visible in the buffer list at the bottom:

- GNU Emacs**: Contains the Emacs welcome message and a list of links (e.g., Emacs Tutorial, Emacs Guided Tour, View Emacs Manual, Absence of Warranty, Copying Conditions, Ordering Manuals).
- *scratch***: Contains a shell prompt `#!/bin/bash` and a function definition `function hello { local HELLO=World; echo $HELLO; echo $HELLO; hello; } echo $HELLO; hello`.
- *Messages***: Contains a message `hello.sh`.
- Shell**: Contains the output of the `hello.sh` script, which is `World`.

Figure 11: Четыре буфера

Выполнение работы

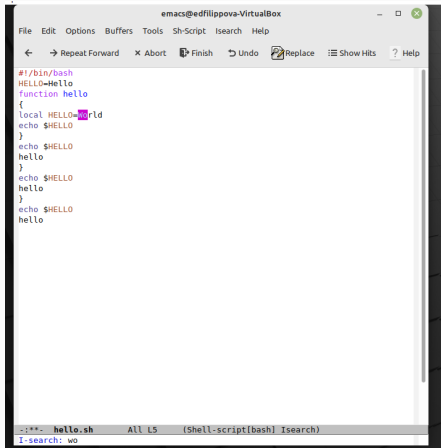


Figure 12: Режим поиска

Выводы по проделанной работе

В данной работе мы познакомились с еще одним редактором операционной системой Linux. Получили практические навыки работы с редактором Emacs.