

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.

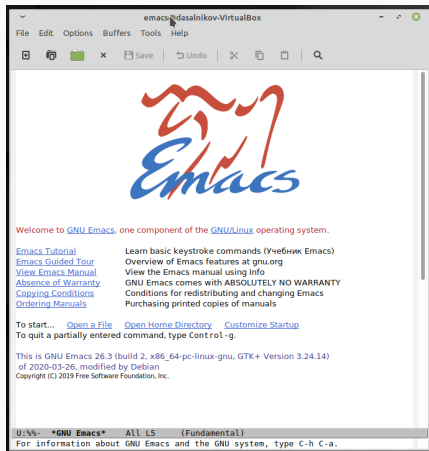
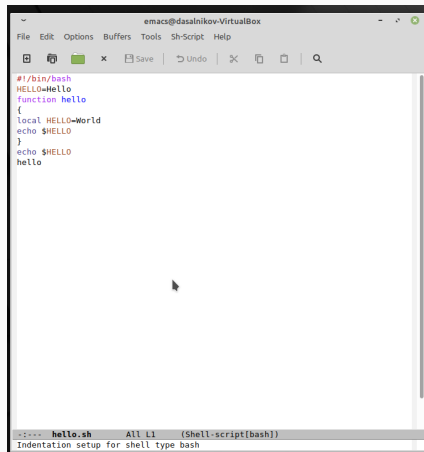


Figure 1: Запуск Emacs

Выполнение работы



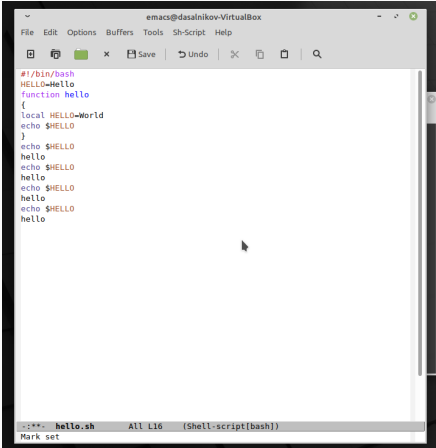
The image shows a screenshot of an Emacs editor window titled 'emacs@dasalnikov-VirtualBox'. The window has a menu bar with 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. Below the menu bar is a toolbar with icons for file operations and editing. The main text area contains the following code:

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

At the bottom of the window, a status bar shows the file name 'hello.sh', the cursor position 'All 11', the shell type '(shell-script[bash])', and the message 'Indentation setup for shell type bash'.

Figure 2: Новый файл

Выполнение работы



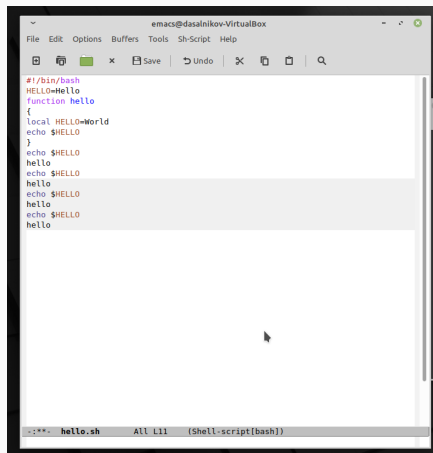
The screenshot shows an Emacs editor window titled "emacs@dasalnikov-VirtualBox". The menu bar includes "File", "Edit", "Options", "Buffers", "Tools", "Sh-Script", and "Help". The toolbar contains icons for file operations and editing. The main text area displays a shell script with the following content:

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

The status bar at the bottom indicates the current buffer is "hello.sh", the cursor is at "All L16", and the mode is "(Shell-script(bash))". A message "Mark set" is visible in the status bar.

Figure 3: Операция вставка

Выполнение работы



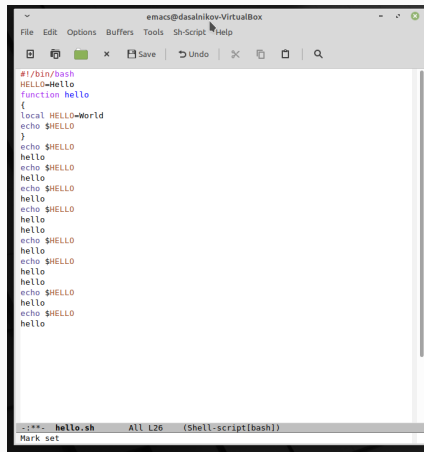
The image shows a screenshot of the Emacs text editor running inside a VirtualBox environment. The window title is 'emacs@dsalnikov-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for file operations and editing. The editor buffer 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
echo $HELLO
hello
```

A light gray rectangular highlight is visible over the lines 'echo \$HELLO', 'hello', 'echo \$HELLO', 'hello', 'echo \$HELLO', 'hello', 'echo \$HELLO', and 'hello'. The status bar at the bottom indicates the file is 'hello.sh', the cursor is at 'All L11', and the shell is '(Shell-script{bash})'.

Figure 4: Выделение блока

Выполнение работы

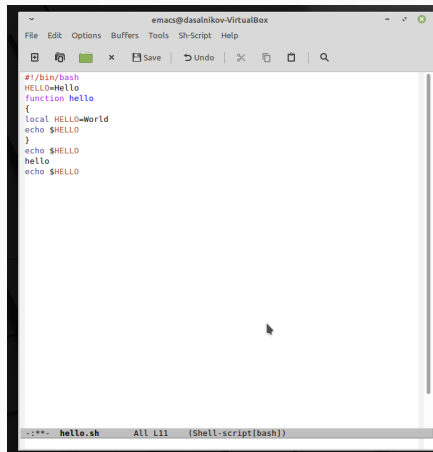


```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
echo $HELLO
hello
```

--:**- hello.sh All L26 (Shell-script(bash))
Mark set

Figure 5: Копирование блока

Выполнение работы



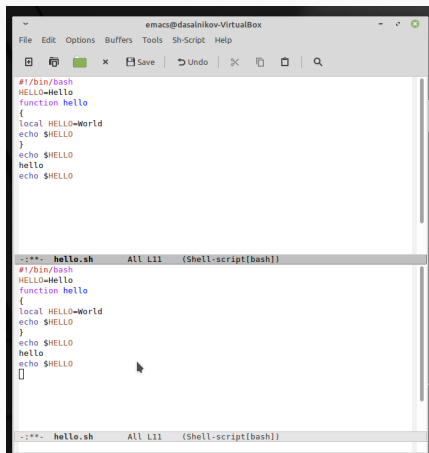
The image shows a screenshot of an Emacs editor window titled "emacs@dasalnikov-VirtualBox". The window has a menu bar with "File", "Edit", "Options", "Buffers", "Tools", "Sh-Script", and "Help". Below the menu bar is a toolbar with icons for file operations and editing. The main text area contains a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

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

The status bar at the bottom of the window displays "--*- hello.sh All L11 (Shell-script{bash})".

Figure 6: Удаление блока

Выполнение работы



The screenshot shows the Emacs editor interface with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar. The main editing area contains a shell script named `hello.sh` with the following content:

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

Below the script, there are two horizontal panels showing the execution output. The top panel is titled `hello.sh` and shows the output of the script:

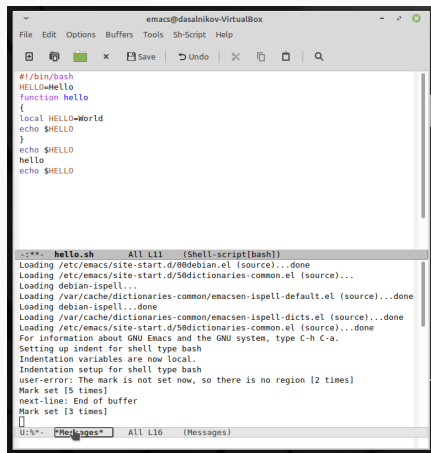
```
#!/bin/bash
HELLO=Hello
function hello
{
  local HELLO=World
  echo $HELLO
}
echo $HELLO
hello
echo $HELLO
```

The bottom panel is also titled `hello.sh` and shows the output of the script:

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

Figure 7: Горизонтальное разделение

Выполнение работы



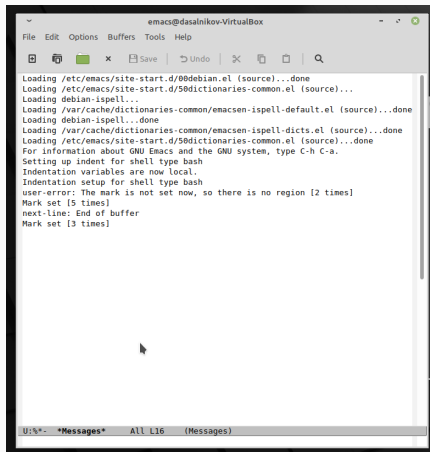
The screenshot shows an Emacs editor window titled 'emacs@dasalnikov-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for file operations and editing. The main text area displays a shell script named 'hello.sh' with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

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

Below the script, the output of running the script is shown in a buffer named '*Messages*'. The output includes messages about loading Emacs site files, setting up the shell type, and indentation variables. It also shows error messages from the shell, such as 'user-error: The mark is not set now, so there is no region [2 times]' and 'Mark set [5 times]'. The status bar at the bottom indicates the current buffer is '*Messages*' and the line is 'All L16 (Messages)'.

Figure 8: Переключение буфера

Выполнение работы



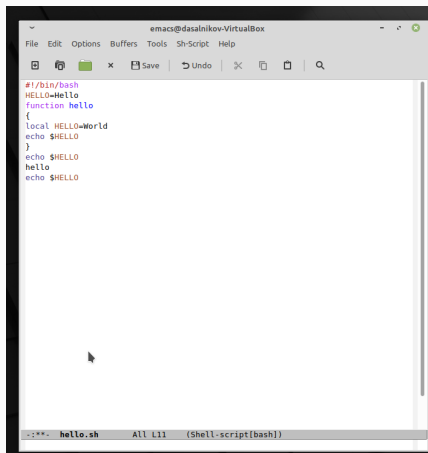
The screenshot shows the Emacs editor window titled "emacs@dasalnikov-VirtualBox". The menu bar includes "File", "Edit", "Options", "Buffers", "Tools", and "Help". The toolbar contains icons for opening, saving, undo, redo, and search. The main text area displays the following output:

```
Loading /etc/emacs/site-start.d/00debian.el (source)...done
Loading /etc/emacs/site-start.d/50dictionaries-common.el (source)...
Loading debian-ispell...
Loading /var/cache/dictionaries-common/emacsen-ispell-default.el (source)...done
Loading debian-ispell...done
Loading /var/cache/dictionaries-common/emacsen-ispell-dicts.el (source)...done
Loading /etc/emacs/site-start.d/50dictionaries-common.el (source)...done
For information about GNU Emacs and the GNU system, type C-h C-a.
Setting up indent for shell type bash
Indentation variables are now local.
Indentation setup for shell type bash
user-error: The mark is not set now, so there is no region [2 times]
Mark set [5 times]
next-line: End of buffer
Mark set [3 times]
```

The status bar at the bottom shows "U:~*- *Messages* All L16 (Messages)".

Figure 9: Закроем буфер

Выполнение работы



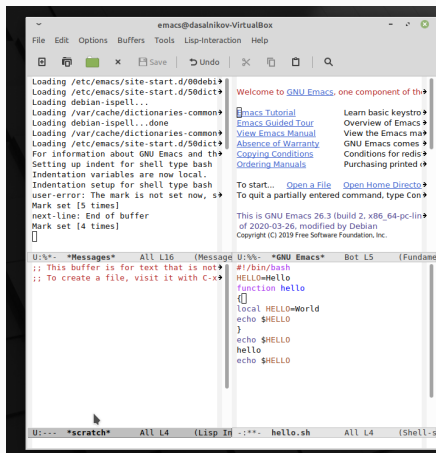
The screenshot shows the Emacs editor window titled 'emacs@dasalnikov-VirtualBox'. The menu bar includes 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. The toolbar contains icons for file operations and editing. The main text area displays a shell script with the following content:

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

The status bar at the bottom indicates the current buffer is 'hello.sh', the cursor is at 'All L11', and the mode is '(Shell-script(bash))'.

Figure 10: Переключение буфера

Выполнение работы



The screenshot shows the Emacs editor window titled 'emacs@dassalnikov-VirtualBox'. The interface includes a menu bar (File, Edit, Options, Buffers, Tools, Lisp-Interaction, Help) and a toolbar. The main editing area is divided into two panes. The left pane shows the output of Emacs startup, including loading site-start.d, dictionaries, and the GNU Emacs version (26.3). The right pane displays the 'Welcome to GNU Emacs' message with links to tutorials and manuals. Below the main panes, a status bar shows four buffers: '*Messages*' (All L16), '*GNU Emacs*' (Bot L5), '*scratch*' (All L4), and 'hello.sh' (All L4). The '*Messages*' buffer contains text about buffer creation. The '*GNU Emacs*' buffer shows a shell prompt and a function definition. The '*scratch*' buffer is empty. The 'hello.sh' buffer contains a shell script snippet.

```
emacs@dassalnikov-VirtualBox
File Edit Options Buffers Tools Lisp-Interaction Help

Loading /etc/emacs/site-start.d/00deb...
Loading /etc/emacs/site-start.d/50deb...
Loading debian-ispell...
Loading /var/cache/dictionaries-common...
Loading /var/cache/dictionaries-common...
Loading /etc/emacs/site-start.d/50deb...
For information about GNU Emacs and th...
Setting up indent for shell type bash
Indentation variables are now local.
Indentation setup for shell type bash
user-error: The mark is not set now, s...
Mark set [5 times]
next-line: End of buffer
Mark set [4 times]
[]

U:%%- *Messages* All L16 (Message U:%%- *GNU Emacs* Bot L5 (Fundame
;; This buffer is for text that is not
;; To create a file, visit it with C-x

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

U:--- *scratch* All L4 (Lisp In -:*** hello.sh All L4 (Shell-s
```

Figure 11: Четыре буфера

Выполнение работы

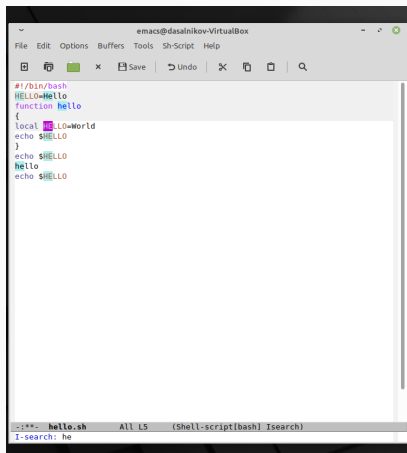


Figure 12: Режим поиска

Выводы по проделанной работе

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