

**РОССИЙСКИЙ УНИВЕРСИТЕТ ДРУЖБЫ НАРОДОВ**  
**Факультет физико-математических и естественных наук**  
**Кафедра прикладной информатики и теории вероятностей**

**ОТЧЕТ**

**по лабораторной работе № 9**

**дисциплина:      Операционные системы**

**Студент: Зевде Эйоб Аманте**

**Группа: НПИ-01**

**МОСКВА**

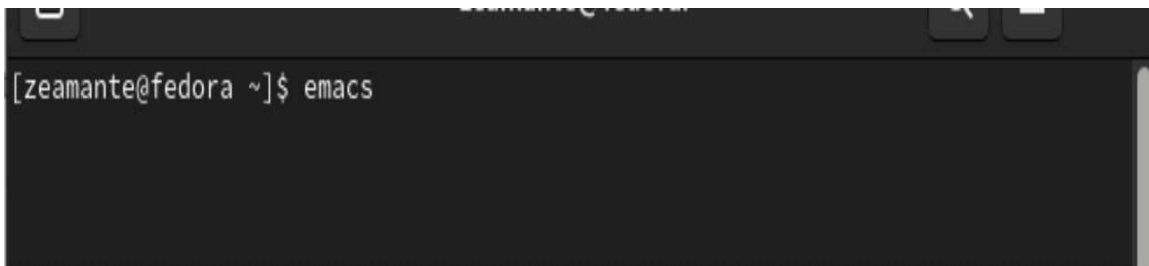
2022 г.

### Цель работы:

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

### Ход работы:

- Открыли emacs



- Создали файл lab07.sh с помощью комбинации Ctrl-x Ctrl-f (C-x C-f).
- Набрали текст:

```
#!/bin/bash
```

```
HELL=Hello
```

```
function hello {
```

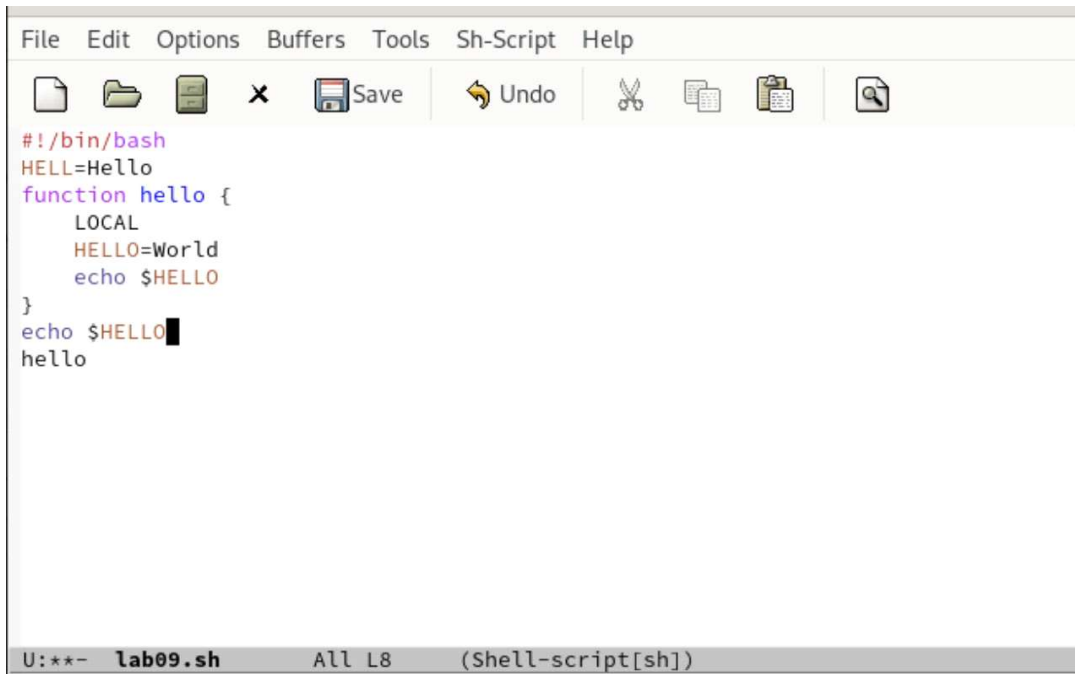
```
    LOCAL HELLO=World
```

```
    echo $HELLO
```

```
}
```

```
echo $HELLO
```

```
hello
```

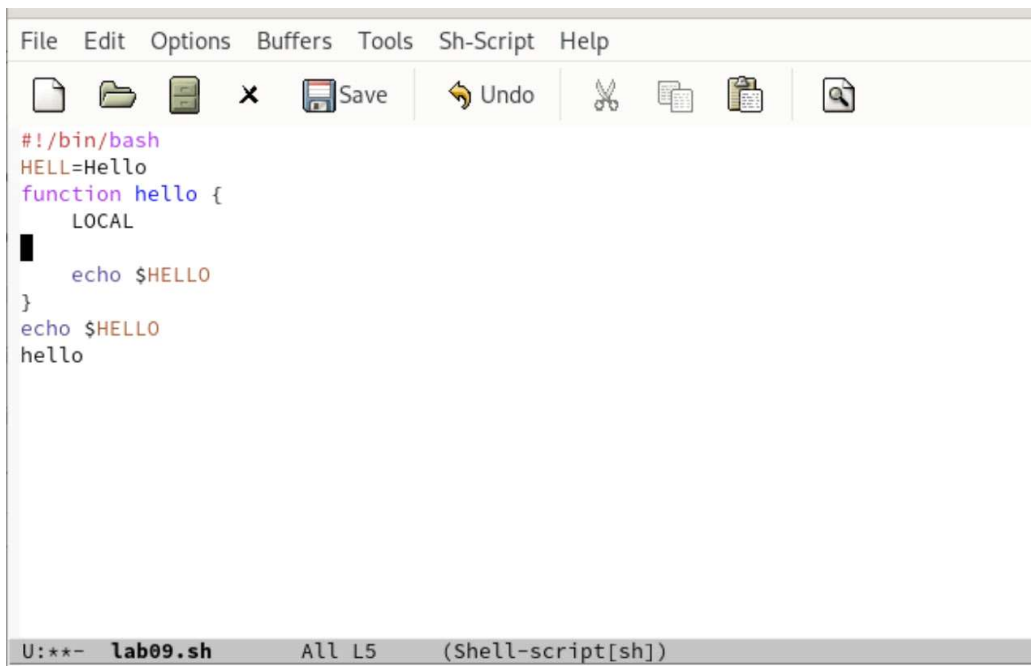


The screenshot shows a window titled "Sh-Script" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations (New, Open, Save, Undo, Cut, Copy, Paste, Find). The main text area contains a shell script:

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

The status bar at the bottom displays "U:\*\*- lab09.sh All L8 (Shell-script[sh])".

- Сохранили файл с помощью комбинации Ctrl-x Ctrl-s (C-x C-s).
- Прodelали с текстом стандартные процедуры редактирования, осуществляя каждое действие комбинацией клавиш.
- Вырезали одной командой целую строку (C-k).

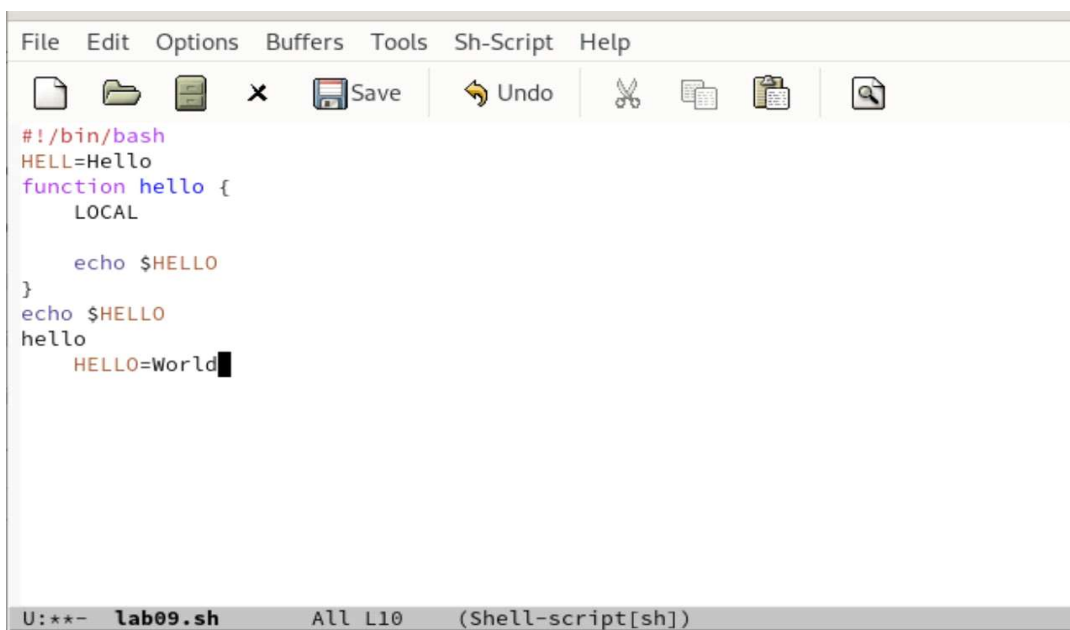


```
File Edit Options Buffers Tools Sh-Script Help
[Icons: New, Open, Save, Undo, Cut, Copy, Paste, Find]

#!/bin/bash
HELL=Hello
function hello {
    LOCAL
    echo $HELLO
}
echo $HELLO
hello

U:*** lab09.sh All L5 (Shell-script[sh])
```

- Вставили эту строку в конец файла (С-у).

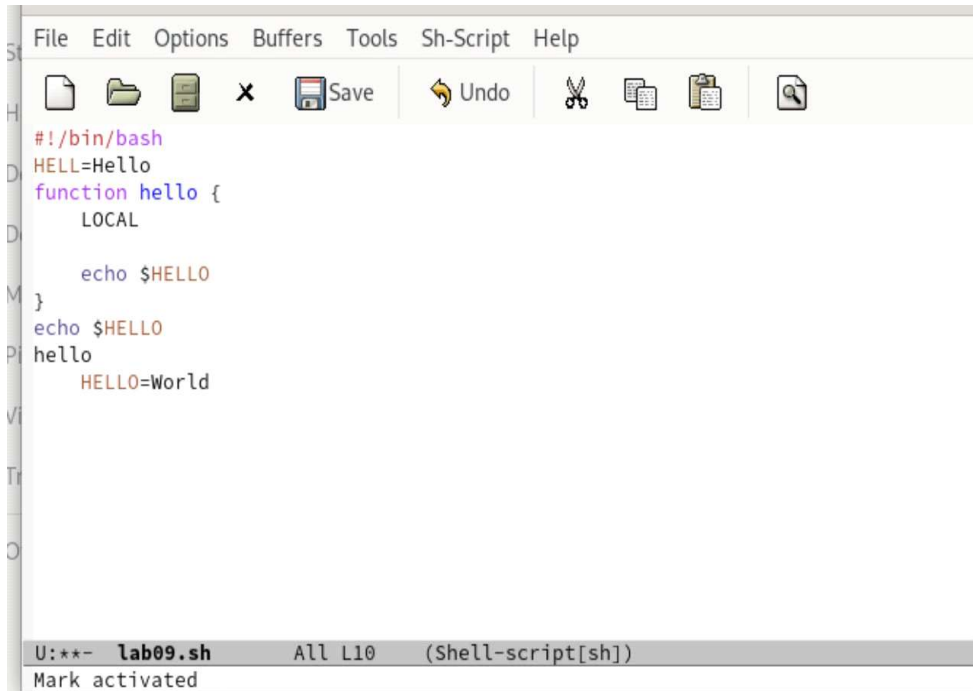


```
File Edit Options Buffers Tools Sh-Script Help
[Icons: New, Open, Save, Undo, Cut, Copy, Paste, Find]

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

U:*** lab09.sh All L10 (Shell-script[sh])
```

- Выделили область текста (C-space).

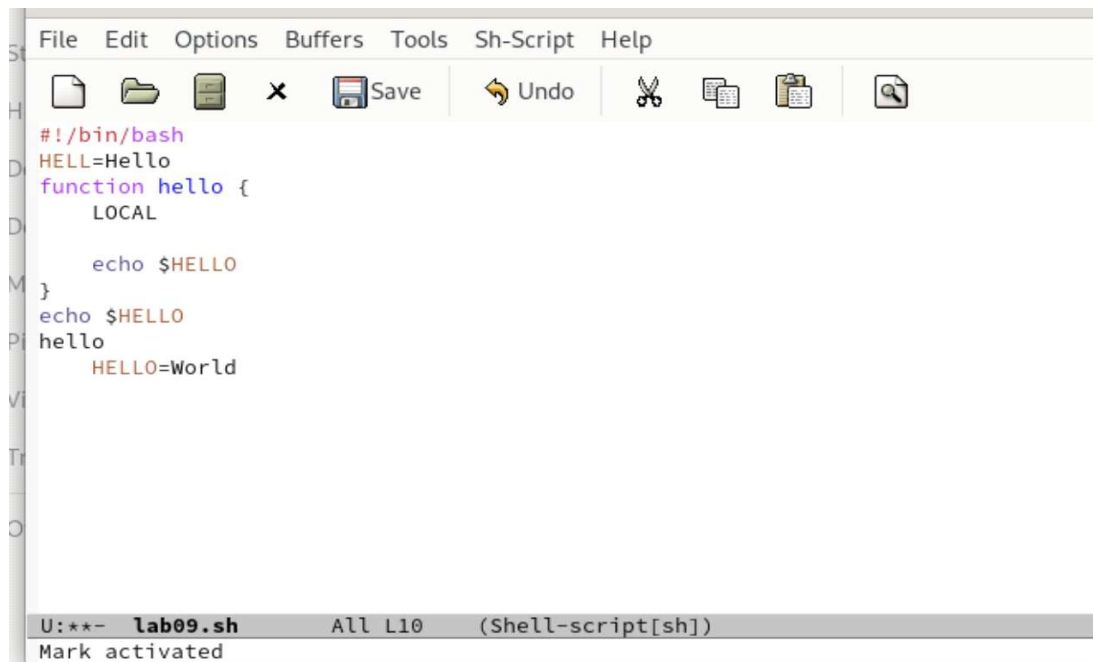


The screenshot shows a window titled "Shell-script" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations and editing. The script content is as follows:

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

The status bar at the bottom indicates the current file is "lab09.sh", the cursor is at line 10, and the shell is "Shell-script[sh]". It also shows "Mark activated".

- Скопировали область в буфер обмена (M-w).
- Вставили область в конец файла



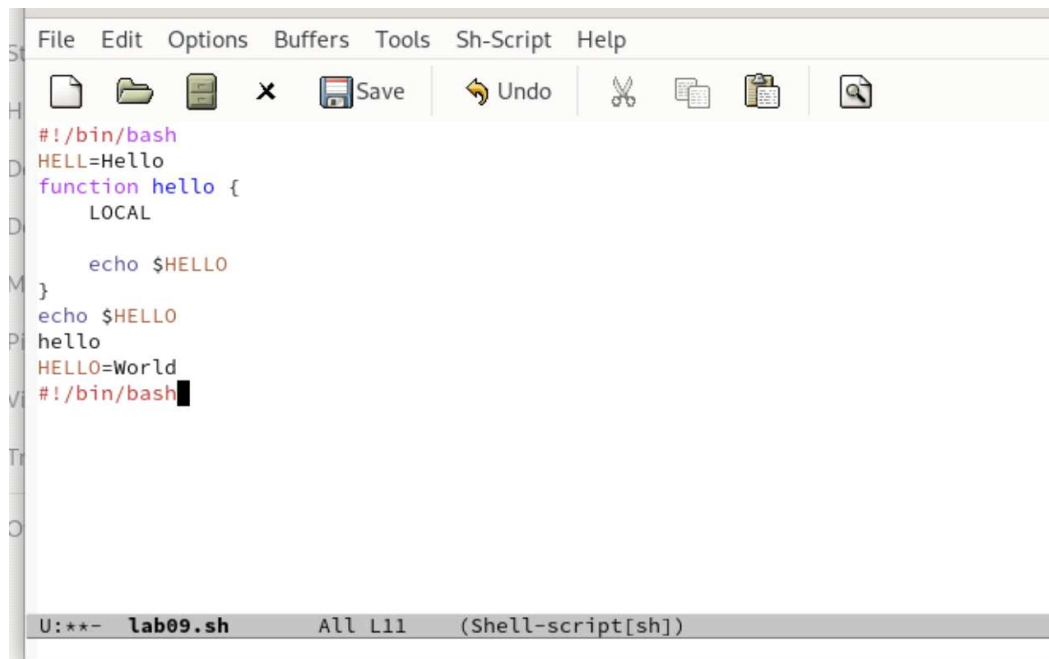
The screenshot shows a window titled "Sh-Script" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations and editing. The main text area contains a shell script with the following content:

```
#!/bin/bash
HELL=Hello
function hello {
    LOCAL

    echo $HELLO
}
echo $HELLO
hello
    HELLO=World
```

The status bar at the bottom displays "U:\*\*\* lab09.sh All L10 (Shell-script[sh])" and "Mark activated".

- Вновь выделили эту область и на этот раз вырезали её (C-w).



The screenshot shows a window titled "Shell-Script" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations and editing. The script content is as follows:

```
#!/bin/bash
HELL=Hello
function hello {
    LOCAL

    echo $HELLO
}
echo $HELLO
hello
HELLO=World
#!/bin/bash
```

The status bar at the bottom indicates the current file is "lab09.sh", it contains "All L11" lines, and the shell is "(Shell-script[sh])".

- Отменили последнее действие (C-/).

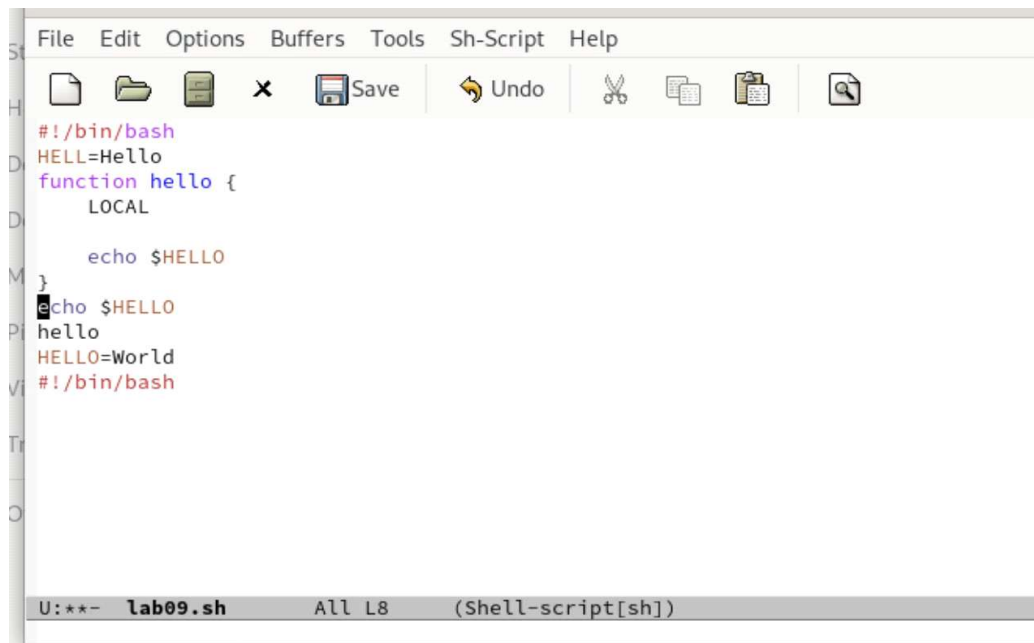
The screenshot shows a window titled "lab09.sh" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations and editing. The script content is as follows:

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

The status bar at the bottom indicates the current line is 11, and the cursor is at the start of the line (column 1).

- Научились использовать команды по перемещению курсора.
- Переместили курсор в начало строки (C-a).



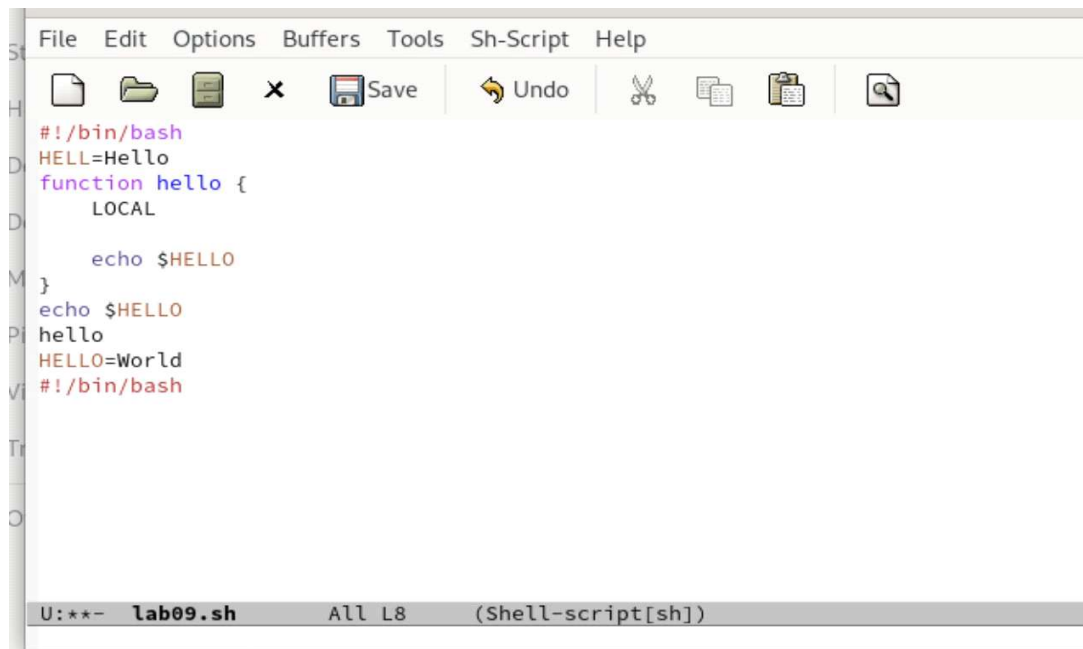


The image shows a screenshot of a shell script editor window. The window has a menu bar with 'File', 'Edit', 'Options', 'Buffers', 'Tools', 'Sh-Script', and 'Help'. Below the menu bar is a toolbar with icons for file operations (new, open, save, close), editing (undo, redo, cut, copy, paste), and search. The main text area contains the following script:

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

At the bottom of the window, there is a status bar with the text 'U:\*\*\* lab09.sh All L8 (Shell-script[sh])'.

- Переместили курсор в конец строки (C-e).

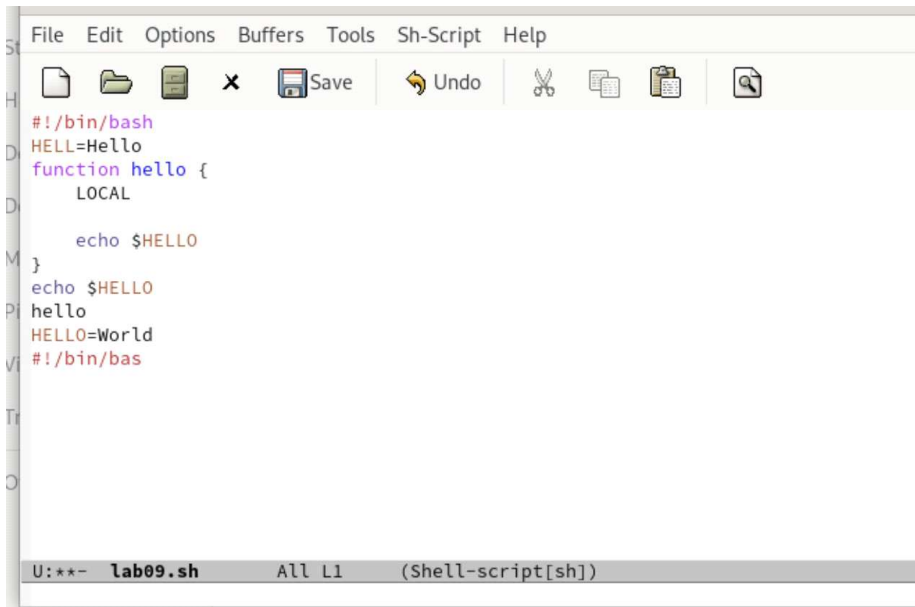


The image shows a window of a shell script editor. The title bar includes menus: File, Edit, Options, Buffers, Tools, Sh-Script, and Help. Below the menus is a toolbar with icons for file operations (new, open, save, close, save all), editing (undo, redo, cut, copy, paste), and search. The main text area contains the following script:

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

At the bottom, a status bar displays: U:\*\*\* lab09.sh All L8 (Shell-script[sh])

- Переместили курсор в начало буфера (M-).

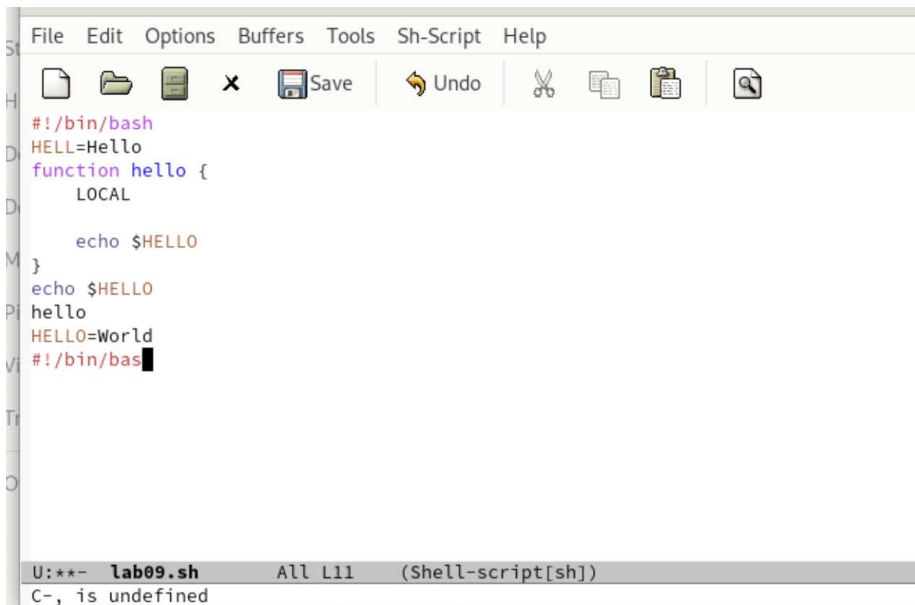


The screenshot shows a window titled "Sh-Script" with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar with icons for file operations. The script content is as follows:

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

The status bar at the bottom displays "U:\*\*\* lab09.sh All L1 (Shell-script[sh])".

- Переместили курсор в конец буфера (M->).



This screenshot shows the same script editor window after the cursor has been moved to the end of the buffer. The script content is identical to the previous image:

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

The status bar now shows "U:\*\*\* lab09.sh All L11 (Shell-script[sh])". Below the status bar, the text "C-, is undefined" is visible.

- Ознакомились с управлением буферами.
- Вынесли список активных буферов на экран (C-x C-b).

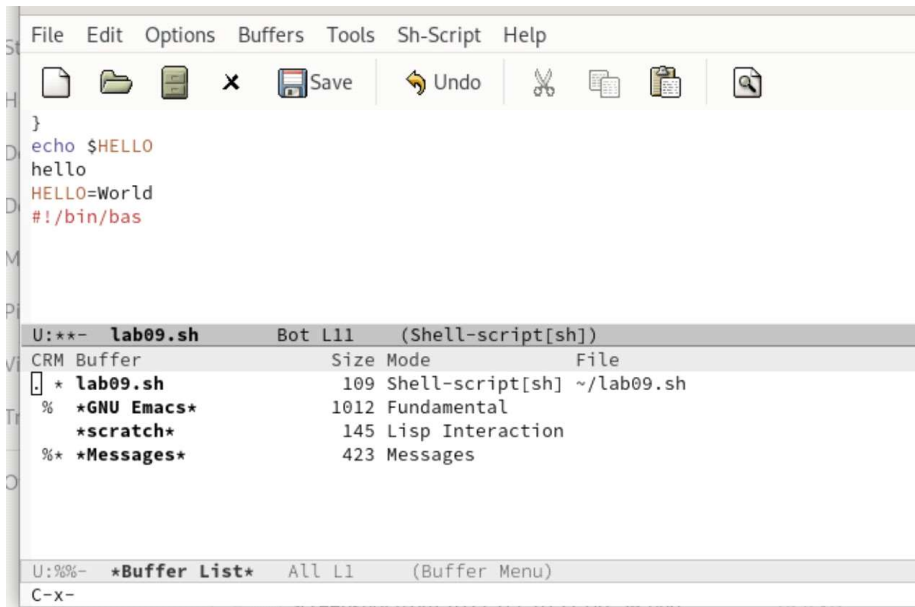
The screenshot shows an Emacs window with a menu bar (File, Edit, Options, Buffers, Tools, Sh-Script, Help) and a toolbar. The main text area contains a shell script:

```
}
echo $HELLO
hello
HELLO=World
#!/bin/bas
```

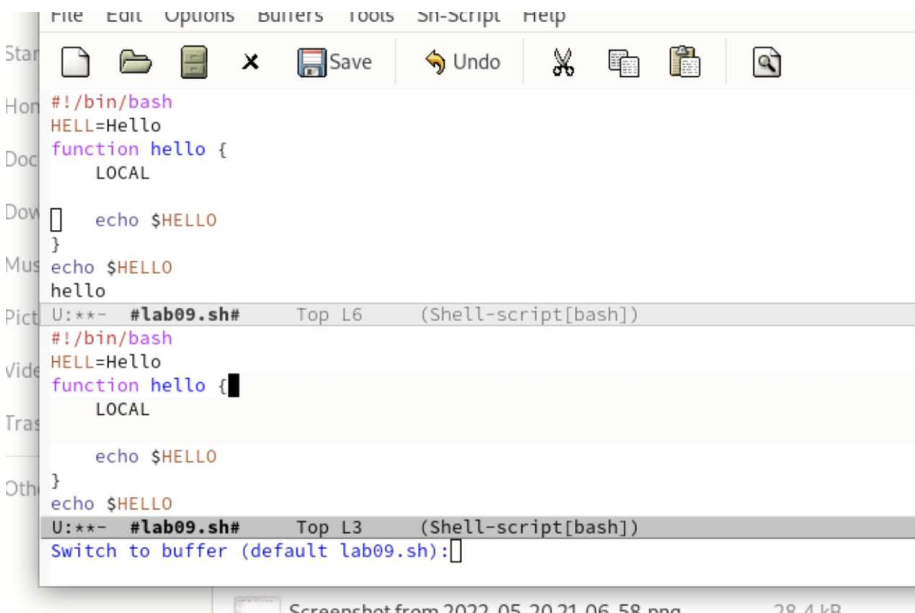
Below the text area is a buffer list window titled "U:\*\*\*- lab09.sh Bot L11 (Shell-script[sh])". It displays a table of active buffers:

CRM	Buffer	Size	Mode	File
	* lab09.sh	109	Shell-script[sh]	~/lab09.sh
%	*GNU Emacs*	1012	Fundamental	
	*scratch*	145	Lisp Interaction	
%*	*Messages*	423	Messages	

At the bottom of the buffer list window, it shows "U:%%- \*Buffer List\* All L1 (Buffer Menu)" and "Mark set".



- Закрыли это окно (C-x 0).



- Ознакомились с управлением окнами.
- Поделили фрейм на 4 части: разделили фрейм на два окна по вертикали (C-x 3), а затем каждое из этих окон на две части по горизонтали (C-x 2)

The screenshot shows a terminal window with a menu bar (File, Edit, Options, Buffers, Tools, Sn-Script, Isearch, Help) and a toolbar with icons for Repeat Forward, Abort, Undo, Replace, Show Hits, and Help. The main content area displays a shell script:

```
#!/bin/bash
HELL=Hello
function hello {
  LOCAL
  echo $HELLO
}
echo $HELLO
hello
```

Below the script, there are two search results from the Isearch tool:

```
U:***- #lab09.sh# Top L6 (Shell-script[bash] Isearch)
#!/bin/bash
HELL=Hello
function hello {
  LOCAL
  echo $HELLO
}
echo $HELLO
U:***- #lab09.sh# Top L3 (Shell-script[bash] Isearch)
Switch to buffer (default lab09.sh): [I-search: [No previous search string]]
```

The bottom of the image shows a status bar with the text "Screenshot from 2022-05-20 21:06:58" and "28.4 KB".

## Вывод:

В ходе работы мы подробнее познакомились с операционной системой Linux, а также получили практические навыки работы с

редактором Emacs.