**"Kyiv Vocational College of Communication"**

**Cyclic Commission of Computer Engineering**

**EXECUTION REPORT**

**LABORATORY WORK No. 3**

from the discipline: "Operating systems"

**Topic: "Getting to know the basic CLI-mode commands in Linux"**

**Performed by students of the group:**

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**Checked by the teacher**

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**Work of group students КСМ-13Б Team:** **bed0lagi**

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**The goal of the work:**

**1. Getting to know the basic commands of the CLI mode in Linux.**

**2. Acquaintance with basic text commands in the terminal mode of work in various OS.**

Material provision of classes:

1. IBM PC type computer.

2. OS family Windows (Windows 7).

3. Virtual machine - Virtual Box (Oracle).

4. GNU/Linux operating system - CentOS.

**Progress**

1)

| locate | Швидкий пошук файлів за назвою. |

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| --- | --- | --- | --- |
| **Team name** | **Its purpose and functionality** | | |
| ls | Displays information about directories and files. By default, with no arguments, displays information for the current directory | | |
| ls -l | Using the -l option in the ls command allows you to display information about files located in the current working directory, in long format that provides more extensive additional information | | |
| ls -l /tmp | Using the /tmp argument in combination with the -l option in the ls command allows you to display detailed information about files in the /tmp directory. | | |
| cd | Changes the current directory | | |
| pwd | Returns the full path to the current directory. | | |
| mkdir | Creates a directory | | |
| rmdir | Deletes a directory | | |
| touch | Creates a file. | | |
| rm | Deletes a file. | | |
| mv | Moves or renames a file | | |
| cp | Copies a file | | |
| cat | Outputs the contents of a file | | |
| less | Browses the file by pages | | |
| more | Browses the file by pages | | | |
| man | Displays help from the command | | | |
| whatis | | | Displays a brief description of the command | |
| whereis | | | Outputs the path to a command or man page file | |
| apropos | | | Search for commands by keywords. | |
| updatedb | | | Creates a database of files for use by the locate command | |
| locate | | Quick search for files by name | | |
|  | |  | | |

**Control questions**

1) The Bash shell includes built-in commands that can be executed without the need for additional software. These comprise numerous other commands as well as cd, pwd, mkdir, rmdir, echo, cat, grep, sort, and uniq. Ordinary programs that are stored in the file system are known as external commands. The Bash shell launches a process that runs that program in order to run them. Programs like ls, cp, mv, rm, man, vim, gcc, and numerous others are examples of external commands. Additionally, the purpose of commands in the Bash shell can be categorized: Work with files and directories is possible with file management commands. Cd, pwd, mkdir, rmdir, ls, cp, mv, rm, and other commands are among them.   
You can start, stop, redirect data flows, and control the operation of processes using process control commands. Commands like ps, kill, top, man, vim, gcc, and others are among them. The system can be configured and administrative tasks can be carried out using system management commands. These include sudo, apt, yum, rpm, dpkg, and other related commands.  
2) Environment variables are variables that are available to all processes and shells on the system and that they inherit.

They are used to store data that can be utilized by a variety of commands and programs. There are two categories of environment variables:

Environment variables are those that have been configured by the user or the system administrator.

They are kept in either the /etc/environment or.bashrc file. The user can set variables in the current shell session, which are known as shell variables.   
They are stored in the shell's memory. Here are some examples of environment variables:

HOME - the path to the user's home directory.

PATH - a list of directories in which the shell looks for executable files.

PWD is the path to the working directory.

USER - user name.

SHELL - the path to the executable file of the shell.

Using the following commands, you can view environment variables in the terminal: All environment variables are listed by the command printenv. Env outputs a list of environment variables in a command-line-friendly format. echo The environment variable variable\_name's value is output by the command $variable\_name.  
**This part of the task was completed by Раєв Богдан**