**"Kyiv Vocational College of Communication"**

**Cyclic Commission of Computer Engineering**

**EXECUTION REPORT**

**LABORATORY WORK** №  **5**

from the discipline: "Operating systems"

**Topic**: **"Getting to know file system navigation commands and managing files and directories"**

**Performed by students of the group:**

Греков Данііл та Богдан Раєв

**Checked by the teacher**

Sushanova V.S

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

**This part was completed by Греков Данііл  
The main target of the work:**

1. Getting practical skills for working with the Bash command shell.

2. Familiarity with basic file system navigation commands.

3. Familiarity with basic commands for managing files and directories.

**Material provision of classes**

1. A PC of the IBM brand.

2. Windows (Windows 7) OS family.

3. Oracle's Virtual Box is a virtual machine.

4. CentOS, a GNU/Linux operating system.

5. The Netacad.com website of the Cisco Network Academy and its online Linux courses

2. Work through each command example from Labs 7 and 8 of the NDG Linux Essentials course, "Navigating the Filesystem" and "Managing Files and Directories," respectively. To list the specifics of these commands, create a table.

|  |  |  |  |
| --- | --- | --- | --- |
| **uname -a** | | **Information about the operating system is printed.** | |
| **cat /etc/os-release** | | **Information about the operating system is printed.** | |
| **ls -l** | | **The list of files in the current directory.** | |
| **pwd** | | **Prints the current directory** | |
| **cd** | | **The current directory is modified** | |
| **mkdir dir\_name** | | **Creates a new directory** | |
| **rmdir dir\_name** | | **Removes a directory** | |
| **touch file\_name** | | **Creates a new file** | |
| **rm file\_name** | | **Removes a file** | |
| **echo "Hello, world!" > file\_name** | | **Writes a line to a file** | |
| **cat file\_name** | | **Prints the contents of a file** | |
| **man command\_name** | | **Prints a manual page for a command** | |
| **history** | | **Prints a list of recent commands** | |
| **cp source\_file destination\_file** | | **Copies a file** | |
| **mv source\_file destination\_file** | | **Moves a file** | |
| **nano file\_name** | | **Opens a file in a text editor** | |
| **vim file\_name** | | **Opens a file in the Vim text editor** | |
| **less file\_name** | | **Views a file** | |
| **head file\_name** | | **Prints the first few lines of a file** | |
| **tail file\_name** | | **Prints the last few lines of a file** | |
| **grep pattern file\_name** | | **Finds lines that contain a specified substring** | |
| **sort file\_name** | | **Sorts a file** | |
| **uniq file\_name** | | **Removes duplicate lines from a file** | |
| **sudo command\_name** | | **Сarries out a command with privileged access.** | |
| **sudo -l** | | **Prints a list of the commands that can be run with special rights.** | |
| **sudo su** | | **Enters a root shell** | |
| **useradd user\_name** | | **Creates a new user** | |
| **passwd user\_name** | | **Changes a user's password** | |
| **userdel user\_name** | | **Deletes a user** | |
| **groupadd group\_name** | | **Creates a new group** | |
| **gpasswd -a user\_name group\_name** | | **Adds a user to a group** | |
| **gpasswd -d user\_name group\_name** | | **Removes a user from a group** | |
| **groups user\_name** | | **Prints a list of the groups that a user is a part of.** | |
| **mount /dev/sda1 /mnt** | | **A partition is mounted to a directory.** | |
| **umount /mnt** | | **The act of removing a partition from a directory** | |
| **df -h** | | **Lists all partitions and their sizes in print** | |
| **fdisk -l** | | **Prints a disk's partition list.** | |
| **mkfs.ext4 /dev/sda1** | | **Formats an ext4 file system partition.** | |
| **ifconfig** | | **Prints a list of network interfaces** | |
| **ip addr** | **Prints a list of network addresses** | |
| **ping IP\_address** | **Sends ICMP packets to a specified IP address** | |
| **traceroute IP\_address** | **Reveals the packets' route to a given IP address** | |
| **etstat -an** | **Prints a list of open ports** | |

5) Command cd /

The root directory is the top level of the file system and is changed using the cd / command from the current directory.

Command cd /home

The /home directory, which is the default location for users, is changed when the cd command is used.

Command cd ~

The user running the command's home directory is now the current directory thanks to the cd command.

Command cd (without argument)

Without an argument, the cd command switches the current directory to the one that was there before the cd command was used.

Command cd ..

Using the cd.. command, you can move your current directory up one level in the directory tree.

Command cd ../..

The cd../.. command moves the current directory up two levels in the directory hierarchy.

Command cd -

When the cd - command is used, the current directory is changed to the one that was there before the preceding cd command was run.  
  
**This part was completed by student Богдан Раєв**