“Kyiv specialized College of Communications”

Commission of computer engineering

**PERFORMANCE REPORT**

**WORK-CASE №1**

From the discipline: "Operating systems"

The students

performed Groups RPZ-03

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Checked by the teacher

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***The material was prepared by student Maria Kulikovska (@Smith5004)***

1. Describe what git is used for, what are the main actions and commands it performs.

Git is a free, distributed, open source version control system that tracks changes to any set of computer files, designed to work quickly and efficiently with any project. It is designed to coordinate work between developers. Version control makes it possible to track and work together with team members in one workspace.

The main commands in Git are:

The git init command allows you to create a new Git repository.

The git add command adds a change to the working directory to an intermediate area.

The git commit command permanently writes or takes snapshots of a file in the version history.

The git diff command shows the differences between files in the intermediate area and the last valid version.

The git reset command removes a file from a stage, but retains the contents of the file.

The git status command displays a list of all files that should be committed.

The git rm command removes a file from the working directory and deletes it in stages.

The git log command is used to view the version history for the current branch.

The git branch command displays a list of all local branches in the current repository.

The git stash save command temporarily saves all modified tracked files.

The git clone command creates a local copy of a project that already exists remotely. The clone contains all project files, logs, and branches.

***The material was prepared by student Andriy Kryvenko (@AndrewKryvenko)***

2. What is a commit and how does it allow you to track changes in files?

"A commit is one of the elements of a version control system. Each commit reflects a set of changes in the project files and is one of the stages in the software development process. A commit has an explanation of the changes made and information about the author, which allows you to track the history of changes in the project files and restore previous versions if necessary.

***3.The report, translation and result of work in the git was made by student Kanavets Kateryna (@kanavetsk)***