**Explain the meaning of Version Control**

Version Control is a work system that aids in tracking changes made to a file or group of files over time. By enabling numerous people to work on the same project, it improves teamwork. It accomplishes this by controlling various file versions and maintaining a commit history, which is a history of saved points. With version control, groups can easily see what changes were made, who made them, and when they were made. In addition, it offers the option to roll back changes to earlier changes in case something goes wrong or to reverse modifications. This ensures that everyone working on a project has access to the most up-to-date and accurate files while also knowing what changes were made and by whom.

**Highlight a benefit of Version Control**

One great benefit of version control is the ability to easily collaborate with others on a project. Many people can work on the same files without worrying about overwriting or losing each other's modifications thanks to version control. It offers a single platform for managing and storing all the various changes of a file or group of files. As a result, team members can work individually on their assigned responsibilities and then easily combine their adjustments. It encourages effective teamwork and assists in preventing disagreements and misunderstandings that may occur when several individuals are working on the same project.

**Provide an application of Version Control. This means, provide an example of how Version Control could be used.**

Software development is one area where version control could be useful. If a group of programmers is developing a web application. They can efficiently manage the codebase by using version control. On a different branch, any developer can work on adding features and making adjustments. They have the option to submit their modifications to the version control system, which records each change that is done.

If any problems occur, like a new bug or a feature that isn't functioning as planned, the team can quickly determine which changes led to the issue by looking through the commit history. After then, they can either work together to resolve the problem or go back to a prior version that worked.

Team members can collaborate seamlessly with each other. They can reconcile any issues that may arise throughout the merge process by combining their branches. This guarantees that the most accurate and up-to-date code is accessible to all.

**Show a command used in Version Control (for example a Git command)**

The "git commit" command is one that is frequently used in version control systems such as Git to save changes made to a repository. A commit message detailing the changes made is provided when using the "git commit" command. An example of the command is

***git commit -m "Add new changes"***

The "-m" in this line shows the presence of a commit message. The commit statement is usually brief yet provide enough context to help the readers understand why the changes were done. The commit message in this instance indicates that a new change was made.