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

Git is a version control system (VCS) used to track changes to software code and collaborate on it. It allows developers to effectively manage projects, track change history, resolve conflicts, and much more. The main actions and commands in Git include:

* git init : Initialises a new repository. It creates a folder with a checkout and an initial commit.
* git clone : Creates a copy of the remote repository on the local computer.
* git add : Adds changes to a file to a stage that is ready for a commit.
* git commit : Commits changes to a stage with a comment.
* git status : Shows the current status of the working directory and stage.
* git log : Displays the history of commits in the repository.
* git branch : Shows a list of branches in the repository.
* git checkout : Switches between branches or commits.
* git merge : Merge branches together, combine changes from one branch to another.
* git pull : Pulls changes from a remote repository and merges them into the local branch.
* git push : Sends changes from a local branch to a remote repository.
* git stash : Stores the current changes in a stage for later use
* git fetch : Fetches information from a remote repository without merging changes.
* git reset : Cancels a commit and changes the history of the repository.
* git remote : Displays a list of remote repositories you are working with.

Git enables developers to collaborate effectively on projects, track changes, manage versions, and resolve code conflicts. It is the first tool for software developers and teams working on software projects of any complexity.