A1. Demonstrate and Create project in local and remote repository using GitBash and GitHub and apply init, status, log, add, commit, push, config, clone and reset commands on repository.

Git **init** command:

Description;

init is the Git command that allows you to create a local repository.This command creates a .git directory that contains all of the folders and configuration files of the local repository.

Syntax :git init

Example :git init

Git **status** command:

Description:

The status command is used to display the state of the working directory and the staging area. It also lists the files that you've changed and those you still need to add or commit.

Syntax :git status

Example :git status

Git **log** command:

Description:

This command is used to check the commit history.

Syntax :git log

Example :git log

Git **add** command:

Description:

Making a commit (which we will see next) is to archive our changes in our local repository. When we edit files, we can choose which ones will be included in the next commit; it's a staged concept. The other files not selected will be set aside for a later commit.

Syntax :git add <files path to add>

Example :git add main.py

Git **commit** command:

Description:

A commit is a Git entity that contains a list of changes made to files and that have been registered in the local repository. Making a commit, therefore, consists of archiving changes made to files that have been previously selected with the add command.

Syntax :git commit -m "<your commit message>"

Example :git commit -m “first commit”

Git **push** command:

Description:

When we make commits, they are stored in the local repository, and when we are ready to share them with the rest of the team for validation or deployment, we must publish them to the remote repository. To update a remote repository from commits made on a local repository, we use this command.

Syntax :git push <alias> <branch>

Example :git push origin master

Git **config** command:

Description:

Git configuration requires us to configure our username and email,

Syntax :

git config --global user.name "<your username>"

git config --global user.email "<your email>"

Example :

git config --global user.name "<yashwanth-j"

git config --global user.email "yashwanthj02@gmail.com”

Git **clone** command:

Description:

This command is used to make a copy of a repository from an existing URL. If I want a local copy of my repository from GitHub, this command allows creating a local copy of that repository on your local directory from the repository URL.

Syntax :git clone URL

Example :git clone https://github.com/Yashwanth-J-03/Jenkins_JAVA.git

Git **Reset** command:

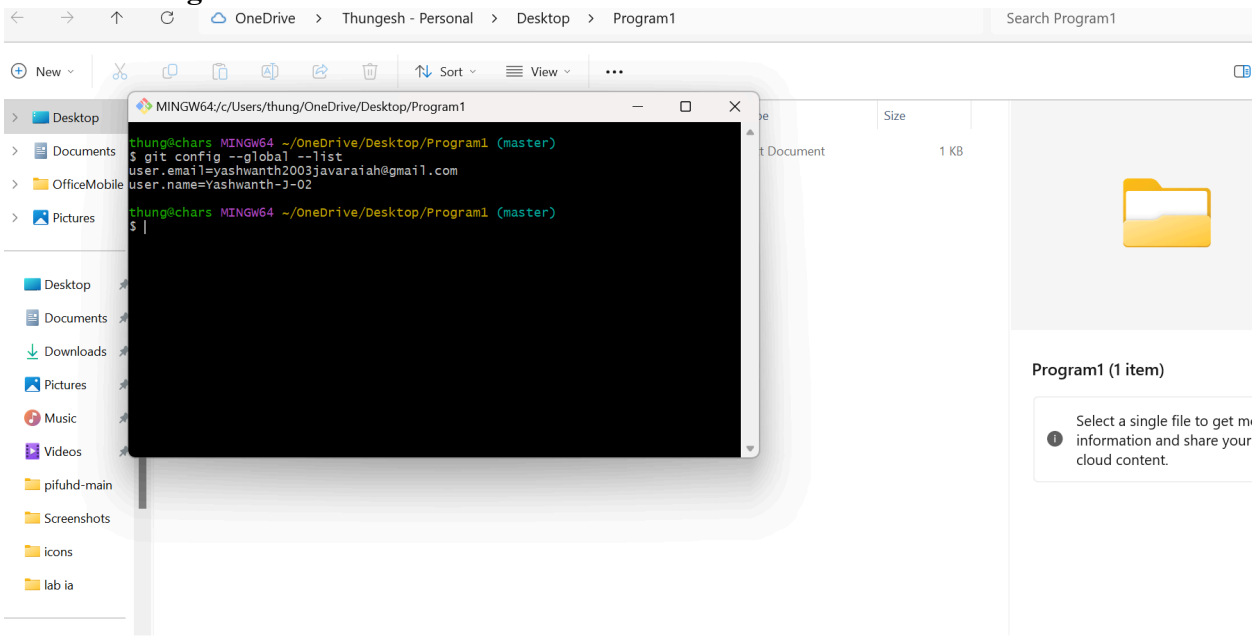
Description:

The term reset stands for undoing changes. The git reset command is used to reset the changes.

Syntax : git reset --hard <id>

Example :git reset –hard 6567b5e3e06421edf403e6bded67732563ef0985

Git user configuration details



Configuration	Execution	Viva	Total	Verified By