

Assignment – 3rd (Git & GitHub)

1. How to check if git is installed on your system?

Ans: - We can check whether Git is installed and what version you are using by opening up a terminal window in Linux or Mac, or a command prompt window in Windows, and typing the following command:

```
`git --version`
```

However, if Git is not installed, you will receive an error similar to the following:

```
`-bash: git: command not found`
```

'git' is not recognized as an internal or external command, operable program, or batch file.

2. How to initialize a new Git repository?

Ans: - To initialize the git we have multiple steps:

1. Create a new repository on GitHub.com. To avoid errors, do not initialize the new repository with README, license, or gitignore files. You can add these files after your project has been pushed to GitHub.
2. Open Git Bash.
3. Change the current working directory to your local project.
4. Use the **``init``** command to initialize the local directory as a Git repository. By default, the initial branch is called main.

```
$ git init -b main
```

5. Add the files in your new local repository. This stages them for the first commit.

```
$ git add .
```

6. Commit the files that you have staged in your local directory.

```
$ git commit -m "first commit"
```

7. At the top of your repository on Github.com's Quick Setup page, click to copy the remote repository URL.

8. In the Command prompt, add the URL for the remote repository where your local repository will be pushed.

```
$ git remote add origin <Remote_URL>
```

9. Push the changes in your local repository to Github.com.

3. How to tell git about your name and email?

Ans: - Tell to the git about name and email we use the following command:

- For name we use the command,

```
$ git config --global user.name "<your_username>"
```

- For email we use the command,

```
$ git config --global user.email "<your_email>"
```

4. How to add a file to the staging area?

Ans: - Using the command **``git add .``** to add a file to the staging area.

5. How to remove a file from the staging area?

Ans: - Using the command **``git restore --staged <file_name>``** to remove a file from the staging area.

6. How to make a commit?

Ans: - Using the command **``git commit -m <commit_name>``** to make a commit.

7. How to send your changes to a remote repository?

Ans: - First add the URL for the remote repository where your local repository will be pushed.

``git remote add origin <Remote_URL>``

After this push the file using ``git push`` command.

8. What is the difference between clone and pull?

Ans: - Git Clone: - Git clone is how you get a local copy of an existing repository to work on. It makes the copy of the repository.

Git Pull: - Git pull is how you update that local copy with new commit from the remote repository.