**GIT Handson – 5**

Explain how to clean up and push back to remote Git

**Solu –**

**1. Update Your Local Repository**

Before you do anything else, it's a good idea to ensure your local repository is up-to-date with the remote. This prevents merge conflicts and ensures you're working with the latest code.

* **Fetch remote changes**: Use the command git fetch to download new branches and commits from the remote repository without merging them into your local branches.
* **Pull changes**: Use git pull to fetch and merge changes from the remote into your current branch. This is crucial if others are working on the same branch.

**2. Clean Up Local Branches**

Over time, you'll accumulate local branches that have already been merged into the main branch and are no longer needed. You can delete these to keep your repository tidy.

* **Delete merged branches**: To see a list of branches that have already been merged into your current branch (e.g., main), use git branch --merged.
* **Delete a specific branch**: Once you've identified a branch to delete, use git branch -d branch-name to delete it. The -d flag is a "safe" delete, meaning it will only delete the branch if it's fully merged. If you need to force-delete an unmerged branch, use git branch -D branch-name.

**3. Push Your Changes**

After you've made your changes and committed them locally, you need to push them to the remote repository so others can see them.

* **Push local commits**: To send your committed changes from your local branch to the remote repository, use the command git push.
* **Set the upstream branch**: The first time you push a new local branch, you need to tell Git which remote branch it should track. Use the command git push -u origin branch-name. The -u or --set-upstream flag establishes a link between your local branch and the remote branch, so future git push and git pull commands will be simpler.

**4. Clean Up Remote Branches**

Sometimes, you may also need to delete a branch on the remote repository. This is common after a feature branch has been merged and is no longer needed.

* **Delete a remote branch**: To delete a branch named feature-branch from the remote, use git push origin --delete feature-branch.