

Configuring The Editor -

```
git config --system core.editor <editor>
```

Git commit Workflow-

Working Directory

```
git add . or file name
```

```
git commit -m "" message"
```

```
git commit -am " message "
```

```
git commit -am " message"
```

```
git commit - when git editor is configured
```

```
git commit --amend
```

Status -

```
git status
```

Log -

```
git log
```

```
git log --oneline
```

```
git log --abbrev-commit
```

```
git log --graph --decorative --oneline
```

Working With Branches -

```
git branch
```

```
git branch <branch-name>
```

```
git checkout <branch-name>
```

```
git switch <branch-name>
```

```
git switch -c <branch-name>
```

```
git switch -
```

```
git checkout -b <branch-name>
```

```
git branch -d <branch - name>
```

```
git branch --delete <branch-name>
```

```
git branch -D <branch-name>
```

```
git branch -m <old-name> <new-name>
```

```
git branch -m <new-name>
```

```
git branch -v
```

```
git branch -vv
```

```
git branch -r
```

Branch merging with no conflict and with merge conflicts -

```
git merge <branch-name>
```

```
git merge <branch to be merged> <branch in which is gonna merge>
```

```
git merge --continue
```

```
git merge --abort
```

```
git merge --quit
```

Comparing Changes -

```
git diff
```

```
git diff commit hash
```

```
git diff <file-name>
```

git diff HEAD <file name>
git diff --staged or --cached <file-name>
git diff <commit-hash> <commit-hash 2 >
git diff <commit-hash>..<commit-hash 2>
git diff branch1..branch2 <file-name> <file-name>
git diff <commit-hash>..<branch-name> <file> <file>
git show <commit-hash> - it show the changes in the commit hash.....

Git Stashing -

git stash save
git stash <file-name>
git stash pop <stash-id> or all changes
git stash apply <stash id> or all changes
git stash drop <stash-id>
git stash clear
git stash list

Time Travelling and un-doing changes with checkout -

git checkout <commit-hash>
git checkout HEAD OR RELATIVE HEAD <file-name>
git checkout -- <file-name> <file-name>

Un-modifying with Git Restore -

git restore <file-name>
git restore --source HEAD-1 OR relative head <file-name> <file-name>
git restore --staged or --cached

Undoing Commits with git reset -

git reset <commit-hash>
git reset --hard <commit-hash>

Reverting -

git revert <commit-hash>
git revert <commit-hash> --no-commit

Rebasing-

git rebase <branch-name>
git rebase -i HEAD or relative head
-reword
-squash
-fixup
-edit
-drop
-pick
git merge --squash HEAD or relative head

git tags -

git tag
git show <tag-name>
git tag <tag-name>
git tag -a <tag-name>
git tag -d <tag-name>

```
git tag -l '*beta*'>
git tag <tag-name> <commit-hash>
git tag <tag-name> <commit-hash> -f
git checkout <tag-name>
```

Custom Aliases -

```
git config --global.alias 'command name'
or
by git config file
```

cm = commit -m

Git reflogs -

```
git reflog show HEAD OR RELATIVE HEAD
-expire
-delete
-exists
-show
git reset --hard master@1
```

Time based qualifiers-

```
3.minutes.ago
yesterday
1.day.ago
Fri,12feb 2021 14:06:21 -0800
```

Configure SSH-

Git remotes -

```
git remote
git remote add origin(any remote name) link
git remote rename <old name > <new name>
git remote remove <remote name>
git remote -v
```

Fetching and Pulling -

```
git fetch
git fetch <origin>
git fetch <remote name> <branch name>
git pull
git pull <remote name >
git pull <remote name > <branch name>
GIT PULL = GIT FETCH + GIT PULL
```

git push -

```
git push <remote name> <branch name>:remote branch
git push -u or --set-upstream <remote name> <branch name>:remote branch
git push
```

force push - git push -f - it allows you to push when you have file present in the remote repo but you don't have that file in the local repo.

Remote Tracking Branches -

git checkout --track remote/branch-name

git reset --hard remote/branch-name

git switch <branch-name>

FOR THE DEATTACHED HEAD - git checkout remote/branch

Cherry-Picking -

git cherry-pick <commit-hash>

git switch <branch-name> then apply on which branch you want to ..

-edit

-no-commit

Search Changes -

git log -S 'Text Tanish op' - It will return us the commits from where it originated and got modified

Prune Branches - The Branches which got deleted remotely but exists in your local machine and you want to delete them as well but you don't know the names of the branches -

git remote update --prune

git branch -vv

git branch -vv|awk '/: gone] | {print \$1}'

git branch -vv|awk '/:gone] | {print \$1}'

Git Bisect - Binary Search Helps us in debugging

git bisect start

git bisect bad

git bisect good

git bisect good

git bisect bad

git bisect reset

git bisect run

now revert to the commit which you got

git revert <commit-hash>

git clean-

git clean -n then use command 'clean' - It list all the files which is gonna remove

git clean -d then use command 'clean' - It list all the directories which is gonna remove

git clean -n -d then use command 'clean' - It list all the files and directories which is gonna remove

git clean -f - No need to use clean it removes all the files inside the directory it doesn't remove the directory

git clean -f -d - Same as above but it removes all files and directories .

R stands for Recursive and F stands for the force

Git collaborative workflow-

Centralized workflow -

feature branch workflow -

fork and clone workflow -

pull requests with no conflicts and conflicts workflow

