## Level 1

- 1. git help
- 2. git help command name
- 3. git help config
- 4. git config –global user.name "kshitijag0209"
- 5. git config –global user.email <u>Kshitij.agrawal0209@gmail.com</u>
- 6. git config global color.ui true

### # Start A Repo:-

- 1. git init // LOCAL SERVER
- 2. git status
- 3. git add . / git add \* / git add -all / git add file or folder name
- 4. git commit -m "message"

### # Git History:-

1. git log

## # git diff → To check difference

# git diff filename /// NOTE:- File should be in staging area

### **SUMMARY:-**

- 1. **git init** → Create Repo
- 2. **git status**  $\rightarrow$  inspect content
- 3. **git add**  $\rightarrow$  add files to directory
- 4. **git diff**  $\rightarrow$  show difference b/w the working directory & staging area
- 5. **git commit** → permanently stores files changes from staging area in repository
- 6. **git log**  $\rightarrow$  show a list of all pervious commits

## **HOW TO BACK TRACK:-**

1. **HEAD COMMIT:** In git, the commit you are currently on is known as HEAD COMMIT. In many cases, the most recently made commit is HEAD commit.

To see the HEAD commit, enter

→ git show HEAD

To revert back:

→ git checkout HEAD filename

will restore the file in your working directory to look exactly as it did when you loast made a commit.

**EXAMPLE:-** git checkout HEAD filename.txt

# Add Multiple File → git add filename\_1 filename\_2

# To Unstage file from staging area use → git reset HEAD filename

### 2. RESET:-

- 1. **First**  $\rightarrow$  git log
- 2. Use → git reset SHAS
  Enter the command to reset to a previous commit, using the first
  7 characters of one of the past commits SHAS in your git log.

# git reset commit\_SHA

**Example** → git reset 56f7cd8

#### **SUMMARY:-**

- 1. **Git checkout HEAD filename** → Discard changes In working directory.
- 2. **Git reset HEAD filename** → Unstage file changes in staging area.
- 3. Git reset SHA  $\rightarrow$  can be used to a previous commit in your history.

# **GIT BRANCHING:-**

- 1. Git branch  $\rightarrow$  check what branch you are currently on.
- 2. New branch create  $\rightarrow$  git branch fencing.
- 3. To switch to other branch use  $\rightarrow$  git checkout <br/> branchname>
- 4. If you want to include changes in fencing branch to master branch → git merge branch\_name.

**Example:**- If, I want to merge 'skills' branch to master use → git merge skills

5. Git merge conflicts →

git checkout master git merge fencing

/// gives error in that different content file.

Git asks which version to keep the master version or fencing version.

- Change the version then add \* then commit.
- 6. Delete branch -d branch\_name

### **SUMMARY:-**

- 1. Git branch → list all branches
- 2. **Git branch branch \_name** → create a new branch
- 3. Git checkout branch name → used to switch to other branch
- 4. **Git merge branch\_name** → used to join file changes from one branch to other.
- 5. Git branch -d branch name → delete the branch specified

## **CLONE**

- 1. Git clone remot\_location clone\_name
- 2. List of git projects's remote → git remote -v
- 3. Git fetch → git fetch
  This command help to keep update
- 4. After git fetch we merge local master to remote master → git merge origin/master

## **SUMMARY:-**

- 1. **Git clone**  $\rightarrow$  create a local copy of remote
- 2. Git remote  $-v \rightarrow$  list a git project's remote
- 3. **Git fetch**  $\rightarrow$  fetch work from the reote into the local copy.
- 4. **Git merge origin/master** → merge origin/master into local master.
- 5. **Git push origin branch\_name** → pushes a local branch to origin remote

## **REBASE**

• git rebase origin/master

It merges requested branch (origin/master) & apply commits that you have made locally to the top of the history without creating merging commit.