

## What is Git?

Git is an open-source distributed version control system. It is used to deal with all kinds of projects, for maintaining the source code of the projects so that the access can be easy and giving the most efficiency.

It is very beneficial when it comes to working in teams where multiple developers are there to contribute to that particular repository where the source code is to be added.

This version control system allows us to keep a track of all the new commits in the source code and work together with all the team members at the same workspace.

**Below are the Top 20 Git Commands that you will be using frequently while you are working with Git.**

1. git config
2. git init
3. git clone
4. git add
5. git commit
6. git diff
7. git reset
8. git status
9. git rm
10. git log

### 1) git config

This command is used to set the author name and email address respectively which is used for commits.

**Command:**

```
#git config --global user.name "[name]"
```

```
#git config --global user.email "[email address]"
```

**Example:**

```
$ git config --global user.name "rajani"
$ git config --global user.email "misalpav103@gmail.com"
```

## 2) git init

This command is used to start a new repository.

### Command:

```
#git init
```

### Example:

```
$ git init
Initialized empty Git repository in /home/cg/root/633ef5bfccdbc/.git/
$ |
```

## 3) git clone

This command is used to get a repository from an existing URL of central repository.

### Command:

```
#git clone [URL of the repository]
```

### Example:

```
$ git clone https://github.com/rajani103/addressbook.git
Cloning into 'addressbook'...
```

## 4) git add

This command adds a file to the staging area.

### Commands:

```
#git add [file] (adding one file)
```

```
#git add * (adding multiple files)
```

#### Example\_1:

```
$ git add file1
```

#### Example\_2:

```
$ git add *
```

### 5) git commit

This command captures a snapshot of the project's currently staged changes.

#### Command:

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

#### Example:

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

### 6) git diff

This command shows the file differences which are not yet staged.

#### Command:

```
#git diff
```

#### Example:

```
$ git diff
```

## 7) git reset

This command unstages the file, but it preserves the file contents.

### Command:

```
#git reset [file]
```

### Example:

```
$ git reset peep.css
```

## 8) git status

This command lists all the files that have to be committed.

### Command:

```
#git reset [file]
```

### Example:

```
$ git reset
```

## 9) git rm

This command deletes the file from your working directory and stages the deletion.

### Command:

```
#git rm [file]
```

### Example:

```
$ git rm peep.css
```

## 10) git log

*This command is used to list the version history for the current branch.*

**Command:**

#git log

**Example:**

```
$ git log
```