**Version Control system:**

***Centralized Version control system (CVCS)***

***Distributed Version Control System (DVCS)***

**Features of GIT**

**Role of GIT in DevOps**

**Installation of GIT in Windows:**

**Creating a repository**

Repository is a storage space where the project lives. It can be in local or space in github or other online host.

Start a project 🡪name the repository 🡪 make it public (or) private and give the access levels 🡪 create the repository.

**Creating a branch**

Branches helps you to work in different versions of a repository. Branch will help you to test the code before committing it to the main branch.

On the left corner you can find the Branch : Master for there you can add the branch

Add Branch 🡪 Name the branch 🡪 files will be added to the branch 🡪 edit the files 🡪 Commit the changes

**Workflow of Git**

Working Directory 🡪 staging area or Index Repository (Here we use git add command in between to add file) 🡪 Git Repository (Here we use git commit command)

***Syntax: Git add <file name> , git commit -m (sort operation)***

**Merge:**

**Fork:**

Getting the code under our own repository from the public repository.

**Git Tutorial – Operations & Commands**

**Basic operations in Git are:**

1. **Initialize**

It is used to initialize a new repository

**Syntax:**Git init

1. **Add**

Add is used to

1. **Commit**
2. **Status**

It is used to know the files that had changes in it.

1. **Pull**

When some changes are done in our local repository we need to make them effect in the main repository for this we use pull request.

**Syntax:** Git Pull

1. **Push**

When we modify the changes to the code in local machine we will push the code to our own private repository.

**Syntax:** Git push

Some advanced Git operations are:

1. Branching
2. Merging
3. Rebasing

***Interview QA links DevOps***

<https://www.gangboard.com/blog/devops-interview-questions-and-answers/>

<https://career.guru99.com/top-11-devops-interview-questions/>

Git:

<https://career.guru99.com/top-40-interview-questions-on-git/>

<https://git-scm.com/book/en/v2/Appendix-C%3A-Git-Commands-Basic-Snapshotting>

<https://www.vogella.com/tutorials/Git/article.html>

**Cheat sheet**

<https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet>