

## GIT Interview Questions and Answers

In case you're searching for GIT Interview Questions and answers for Experience, this is the correct place. There is a parcel of chances from many presumed organizations on the planet. The GIT advertise is relied upon to develop to more than \$5 billion by 2021, from just \$180 million, as per GIT industry gauges. In this way, despite everything you have the chance to push forward in your vocation in GIT Development. GangBoard offers Advanced GIT Interview Questions and answers that assist you in splitting your GIT interview and procure dream vocation as GIT Developer.

These GIT interview questions and answers are based on mega trending topics. If you master most of these topics, there will be no GIT interview question that you cannot answer and secure your dream job.

### Q1) What is a version control system (VCS)?

Version control systems are software tools that help a team manage changes to source code/documents over time.

### Q2) Why are version control systems (VCS) necessary?

They allow you to

1. Keep track of code changes.
2. Can help team members to synchronize the code to the latest version easily.
3. It helps teams to develop products faster.
4. Helps teams to collaborate with each other easily.
5. It acts as a backup for your code base.

### Q3) What are distributed version control systems (DVCS)?

Distributed revision control synchronizes repositories by transferring patches from peer to peer.

There is no single central version of the codebase instead, each user can download a working copy and the full change history.

Hence not requiring to be connected to the server all the time.

Example : GIT

#### **Q4) What are centralized version control systems (CVCS)?**

It is a version control where there is a single central repository hosted on a server. This server is expected to have the latest code and expects all its clients to contribute by being connected to the server always.

#### **Q5) How does git maintain the data internally.**

Git mainly uses three different types of objects to hold information about a repository

- `blob` binary form of the actual data
- `tree` It contains pointers to the objects
- `commit` Commit object contains information about the author, date, hash

#### **Q6) Can git be used locally without using GIT server or any SAAS providers like `bitbucket` & etc**

Yes, if a person is willing to work on the project alone he can use git to maintain the state of the project.

However the full potential of git is unutilized.

#### **Q7) How do you find a list of files impacted with a particular commit hash?**

```
git diff-tree -r {hash}
```

#### **Q8) What is a conflict in git. Is it necessary?**

A conflict in git arises when branches are merged with new commits which has changes on same file(s). In cases

like this git cannot take precedence of changes hence it raises a conflict.

It is necessary for git to highlight conflict because they can only be solved case by case manually. Hence

they aren't notified to the user to fix them before a merge.

### **Q9) What is the difference between git pull and git fetch**

Git fetch will download new commits from a remote repository to a local repository

git pull does the same as git fetch and also merges the same into your local working files

### **Q10) How are conflicts solved?**

The files in conflict must be edited and fixed. Then add the resolved files by running

1. git add .
2. git commit

### **Q11) What is the command that defines the author email to be used for all the commits performed by the current user?**

```
git config global user.email <email>
```

### **Q12) GIT belongs to which generation of version control tools**

3rd

### **Q13) What is GIT stash**

When changes are made to the working directory but you don't want to commit them, you can use git stash to temporarily save them. This allows you to attempt to recreate a clean working directory. GIT stash is used where all changes in working directory and Index are pushed into a stack.

### **Q14) How do you create a new branches**

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

### **Q15) How do you checkout to a particular branch**

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

### **Q16) What is the default branch that is automatically created?**

master

### **Q17) What languages were used to build the git?**

C was the major language although few parts were also written using shell, perl, tcl and python

### **Q18) What is git config?**

git config allows you to configure git installation.

example includes setting user name , password, email etc

### **Q19) What is git clone?**

Git clone lets users to copy an existing git repository that resides in the server.

It is the easiest way that a new developer can start using and contributing to the project

### **Q20) What is branching?**

Branching is analogous to a storyline on which changes are made. The changes can reside in different branches

so that each branch can make changes independent of each other.

### **Q21) What is the command line environment used to perform git operations?**

git bash

### **Q22) What is git cherry pick?**

cherry pick allows you to pick a particular commit from a branch and insert to another branch. This is different from git merge in that, git merge will bring in all commits from branches while cherry pick picks a specific commit only

### **Q23) How to return a commit that has been pushed and made open?**

git revert HEAD~2..HEAD

### **Q24) What is gitflow workflow?**

It is a workflow that can be used to maintain large projects and it mainly consists of

The master branch is always ready for live release with everything production-ready.

The Hotfix branches help in quick patching of production releases.

The Develop branch helps in merging of all feature branches and also performs all the tests.

The Feature branch implies a unique branch for every new feature. The feature branch could be pushed to the development branch just like their parent branch.

### **Q25) What is the syntax for rebasing ?**

`git rebase [new-commit]`

### **Q26) What are git webhooks?**

When planning to cascade/notify new activities on git server to a different tool like Jenkins, git webhook is used. The webhook contains information about the activity (ex: push on the server).

### **Q27) What is git instaweb**

It's a command that helps in directing a web browser and running a web server with an interface to the local repository.

### **Q28) What hash is used in git ?**

sha1

### **Q29) sha1 is now considered unsecured. Does that mean git is under threat.**

¶ No. since git uses sha1 to only hash data to compare files/maintain state a  
git

### **Q30) What is the max number of heads that can be used in git?**

unlimited

### **Q31) How many characters are used in sha1 name**

40 chars

### **Q32) What is a commit message.**

It is the message assigned to a commit made. When a commit is made a hash is assigned automatically but for humans it becomes difficult to make anything out of this hash at later point of time. Hence a commit message is assigned along for his future reference

### **Q33)Name few graphical git clients**

git cola, git gui

### **Q34)What is git diff?**

Git diff represents the changes between the commits and changes between working tree and commits.

### **Q35)What is git pull origin?**

The command git pull origin master tells git to perform a pull operation (download a copy of repository) wherer the origin represents the server url (alias) and master is the name of the branch

### **Q36) What is gitlog?**

It is basically a command that can be executed when it comes to finding the history of a project according to the date, changes made, the developer who handled it and usefulness of the same.

### **Q37) How can a developer update his changes to the git server.**

Perform git push from the branch he is currently checked out to.

### **Q38) How do you make git not to consider few files/directories track changes.**

need to add them in .gitignore file

### **Q39)What is the difference between git add . git add -all**

They are same

### **Q40) What is git bisect?**

It's the command that uses a binary search algorithm to find which commit introduced a bug. Before the bug is introduced into the commit, the commit is referred as good. After the bug is introduced, it is referred as bad. Then the command used picks a commit between the two and checks it out. The process continues till it finds the exact commit that introduced the change.

#### **Q41) What is git stash drop?**

Its the command that helps you remove the last entry made to the stash list or it can also help to eliminate any stash entry

#### **Q42) How do you delete a branch locally?**

`git branch -d <branch name>`

#### **Q43) What is git clean?**

It cleans a repository by removing the files that are not currently tracked by git recursively.

#### **Q44) What is git pop?**

It is the command that helps you retrieve the changes pushed on the stack.

#### **Q45) What is git fork?**

A fork is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project. Generally open source projects follow fork workflow to allow users to contribute to the project.