1)What is Git ?

ans: Git is a distibuted Version control system.it is used for code collaboration for track the changes in the files.We can also secure the code in one git repository.

2) In what form is Git being used in your Company? Give examples of a few types of Git implementations.

ans:

It is used as version Control system.

To maintain the code in the central repository and integrate with the automation tools to automate build and deployments.

3) What are the different Tools that you integrated Git with in your company ?

Ans:

we used to integrate Git with Jenkins,maven.and jira for the ticketing tool.

4) What are Git hooks ?

ans:

git hooks like trigger scripts. Basically git is a distibuted Version control system.so we have two repositories one is local repository and one is remot repository.so we have two kinds of hooks in the git one is server side hooks and one is clint side hooks.

server side hooks:- these hooks are triggered when ever developer push the code from his local repository to the remote repository.when developers clone the repository these hooks scripts are not copied into the developers repository.

clint side hooks:- these hooks are triggered when ever a developer try to commit the code into the his local repository

these hooks are does't effects on other developers.

5) Give us an example of a Git Hook that you implemented?

Generally we have 2 types of hooks are there

1.pre commit hook

2.post commit hook

pre-commit hook:-There is a one requirement for a manager "if some one push the code into the server side repository with out commit message containes a jira ticket number and bug id" then i can stop these commits by using the pre-commit hook.

In the svn generally we try to impliment in like this.



This script will works like if your commit message containes less than 5 charecters then i will stop these commits into my repository. and my pre-commit hooks will take care about all these actions.

generally it look like this



in this output i pass only 3 charecters in my commit message but in my script i gave minimum of 5 charecters.thats why it is not allowing the commit. so like this we can restrict the commits if commit message should containe jira number or bug id.

post-commit hook:-There is a one requirement for a manager "when ever some one commits the code into the remot repository send an email to me" then i will use my post-commit hook for send an email to my manager.

Basically now a days we are mostly using the web hooks for integrating with other software tools aswell like jenkins.

6) List all commands a developer uses to push to git starting from clean workspace ?

ans:

1.git init (repo name) -->creating a repository

2.git clone (remote repo url) ---> for getting a copy of a remote repo into your repository

3.git add --> adding the files into local work space

4. git commit --> for commitimg the files into the staging area

5.git push origin master --> push the code from your local work space to remote repository.

7)Difference between Git push and Git pull

ans:

git push:- git push is used for the adding your file changes from your local work space to the remote repository.

git pull:- getting the files from the remote repository (those files are nothing but the other developers made some commits)

into your local repository.

8) Different between Git Rebase and git pull

ans:

git rebase:-

git pull:- git pull is used for the keep update our repository with the remote repository.

9) What is the command to know what branch you are currently on ?

ans:

If you are working on 3 diffrent branches you dont know where you are then you type the command "git branch " then it display all the branches that you have and one of the branh containes (\*) this indicates that you are on that branch.

10) Command to know what other git branches exist on the git server ?

ans:

git branch -a ---> for displaying the all branches.

git branch -r ---> for displaing the all remote branches.

11) what is a git remote ?

ans:

It is a management tool to record the remote repositories. It allows you to save long urls as short handles.It is also used to add, change and delete.

12) How can you temporarily save changes before pulling/merging or switching branches?

ans:

If i made 10 file changes in my local repository Some times when i rebase the git by using the git pull --rebase then git is not allowing to rebase (or) to switch the branch from one branch to another branch then i will store the 10 modified files temporarily in a cache then i will use git stash. after that i will use git pull --rebase then i will use git stash pop.

13) difference between git branches and git tags ?

ans:

Git branch can create,list or delete branches

Git tags :It is to give bookmark permanently create,list,delete urls.

14) what are different types of git tags available ? give exact commands on how to create each type of tag ?

ans:

Annotated tag: git tag -a v1

Lightweight tags :git tag v1

Tagged later :git log --pretty=one

shared tags: git push origin

15) what command do you use to merge two branches ? give exact commands. How do you know what files need conflict resolution?

How do you proceed after resolving a conflict?

ans:

one of the advantage of git is merging two branches very easy.assume that we have 2 branches one is A and one is B. if i want to merge branch A into branch B then i will do like this

git checkout B ---> to go to branch B

(so now iam in branch B)

git merge A ---> to merge branch A into branch B.

now branch A was merged into the branch B.

if you want to delete the branch A. then i will do like this

git branch -D A(here A is branch name)

16) How do you know current state of your workspace to that on git server ?

ans:

git status

17) What command is used to fetch the latest updates by others?

ans:

git pull origin master

18) What command is used to create a git repo for your personal development?

ans:

git init --> will create a repository.

19) Explain the relationship between the working directory,

the index, the repository

ans:

Working directory :working directory is where the modified files are adding and do the changes.

Index:- commiting the files into the staging area is called index are or staging area.

Repository:- Where the all files are stored securelley.

21) what command do you use to know list of previous commits ?

ans:

git log

22) What is 3a525393f6a5c47fa08d91ef16c16927ed3cd33a? What are the benefits of this?

ans:

All the information needed to represent the history of a project is stored in files referenced by a 40-digit "object name" called SHA 1 hash. It is a unique ID. The advantages are:

* Git can quickly determine whether two objects are identical or not, just by comparing names

Git can detect errors when it reads an object, by checking that the object's name is still the SHA1 hash of its contents.

23) command to rename a file in Git?

ans:

git -mv oldfile newfile

24) What git command is used to undo changes made to your local repo? What are the variations and how do they work?

Ans

git reset --> is used for the unchange the files in the local repository.

25) What is the command to use

1) to delete a local git branch?

git branch -D (branch name)

2) to delete git branch on remote server

git push origin (branch name)