

Q.1 Version control system is way/tool that help codes to track and manage or change made in ~~their~~ their code. By the time code changes alot and it is hard to keep track of that version control system helps their alot.

Q.2 Version control system helps in many aspects in software development. As the development is a continuous process of modifying codes. there is a very high chance of errors. Version control system is very help full in resolving errors and revert to previous version. It also develop help the developer to ~~test~~ maintain the version, new features of code in a documented way.

One of the best use case of version control is that we can create branches. branch in our main code it make collaboration easy. with no risk of errors.

Q.3 There are two types of version control system centralized version control and Distributed version control.

① Central version control :- In this type

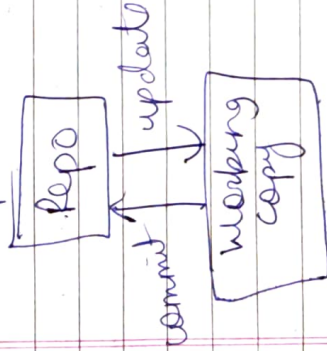
We have single copy of our project on server and we make changes in ^{to this} central copy. Example \Rightarrow CVS Subversion

② Distributed version control:- In this ~~system~~ system ~~to~~ we have full copy of project in our local system.
Example - Git

Q.4 Centralized version control

① All files stored in server, but locally we don't have full copy

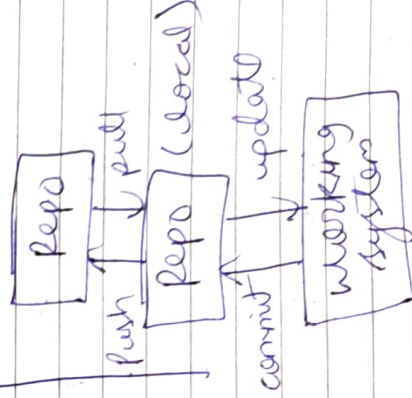
② Example - Subversion



Distributed version control

① All files with full version history stored in local system

② Example - Git



Q.5 Git is a type of version control system. Owned by Microsoft. Git allows multiple developers to work on same repo. It is used to track changes in the source code. It is free and open source.

Q.6 (i) Version tracking (ii) open source

(iii) Branching (iv) helps in collaboration

(v) Multitasking

(vi) Free

Q.7 git init :- Initializing an existing directory as git repo.

git clone - Copy whole repo locally using URL.

git log - Show all commit.

Q:8 NO, they are not same. Git is version control system it provides tracking modifying code.

but Git hub is cloud-based repo system

Q:9 git --version

Q:10 git add.

Q:11 git status - Show all modified files in working directory, staged for your next commit.

git log - Show all commits in the current branch's history

Q:12 git init

Q:13 Untracked - with git init we keep track of files and now they are untracked

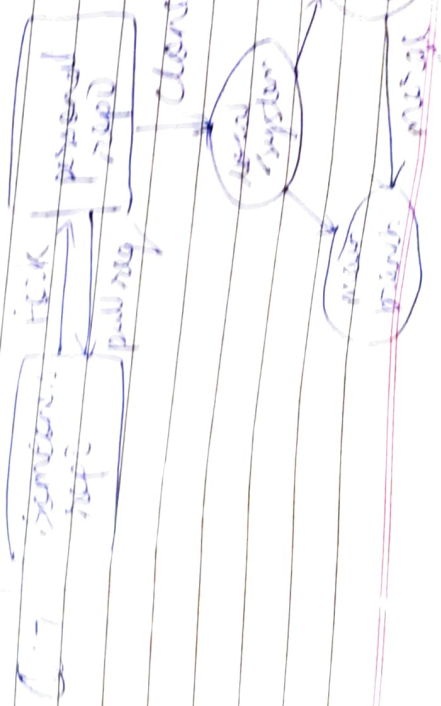
Unmodified with get add. in
take the file
storage area

Corrupt/added or lost with get add.
in add the file
in the main page.

Client takes get name and then authentication
we change the new address command
the do that like get with the
get add. then get - write - or
we add a file in the

is at corrupt - or

is at corrupt - or "New Email"



0:18 Branch ~~is~~ provides non-linear development it separates the line of development and so that multiple developers can work on same project at once and we can merge them at the end. the main branch is called as master branch.

0:19 git branch ~~is~~ new-email

0:20 git checkout new-email

0:21 git checkout -b new-email.

0:22 Initializing existing directory as a git repo.

0:23 Fork is used to copy a repo that is on a remote server.

Clone is used to copy a repo created on local machine.

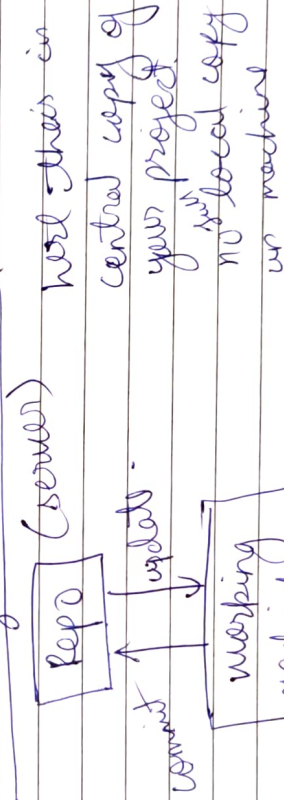
to fork a repo we have a option in gitlab "fork".

To clone we a vpl option with git clone command we can clone it in our local machine.

Q24 Push command is used to upload local commit to remote repo.

git push <remote> <branch>

Q25 Centralized version control.



distributed version control.

