GIT fetch

- It will bring all the changes from remote repository to local repository
- it will not affect our working directory
- Git fetch only downloads latest changes into local repository
- There is no chance for any kind of conflict

When to use Git fetch ?

If we want to check is there any updation happens on the remote branch before pushing our branch then we will use git fetch command

Git pull

- It downloads latest changes into the local repository and it also automatically merges changes in our working directory
- It doesn't give a chance to review the changes before merging and as a consequence, 'merge conflicts' can and do occur.
- It will merge only into the current working branch

git pull = git fetch + git merge

git clone - Command to clone a git repo from a remote server or github

git status - Command to change the current status of the branch and to know the state of changes i.e. Modified, Staged or Committed State

git log - Command to see the last 'N' git commits on the branch

git remote - Command to set and check the remote server e.g. github

git push - Command to push our changes to a destination which can be a remote server or Github

git commit - Command to commit the changes to the local branch which was cloned using git clone

git add - Command to add the changes from Modified State to the Staged State

git restore - Command to restore the file in original state by discarding all the changes or change the file from staged state to modified state

What is the command to check the last 3 logs
"git log -3"

```
[root@ip-172-31-1-60 day2.2]# git log -3
commit 7b4d2a40524e2b5850d255d2c41ca2f019badfba (HEAD -> master)
Merge: cdd4114 32ee560
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 15:40:14 2021 +0000

    resolved the issues

commit cdd41144d731ea26bc07920e7a82da94061ce68c
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:57:28 2021 +0000

    3rd commit

commit 32ee560e0819b870b593a4a6bc67e2dc33150294 (dev1)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:52:13 2021 +0000

    Third commit
[root@ip-172-31-1-60 day2.2]#
```

How to roll back from staging area

How to roll back commit

```
[root@ip-172-31-1-60 day2.2]# git reset --hard
HEAD is now at 7b3f046 last
[root@ip-172-31-1-60 day2.2]# git reset HEAD *
[root@ip-172-31-1-60 day2.2]# git reset --hard
HEAD is now at 7b3f046 last
[root@ip-172-31-1-60 day2.2]# git revert HEAD
[master 9b4a2a8] Revert "last chnage"
 1 file changed, 5 insertions(+)
[root@ip-172-31-1-60 day2.2]# git log --oneline
9b4a2a8 (HEAD -> master) Revert "last chnage"
7b3f046 last
7b4d2a4 resolved the issues
cdd4114 3rd commit
32ee560 (dev1) Third commit
0ffc561 Third commit
9ee0149 second commit
f86b769 First commit
[root@ip-172-31-1-60 day2.2]#
```