

Checked git is installed or not in ec2 linux machine

```
root@ip-172-31-1-60:~  
└─ login as: ec2-user  
└─ Authenticating with public key "imported-openssh-key"  
  
      _|_ _|_)  
      _|(_ /   Amazon Linux 2 AMI  
      _|\_\_|_ |  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-1-60 ~]$ git --version  
-bash: git: command not found  
[ec2-user@ip-172-31-1-60 ~]$ yum install git  
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd  
You need to be root to perform this command.  
[ec2-user@ip-172-31-1-60 ~]$ sudo su - root  
[root@ip-172-31-1-60 ~]# git --version  
-bash: git: command not found  
[root@ip-172-31-1-60 ~]#
```

to install the git in linux use the following command

**yum install git**

```
root@ip-172-31-1-60:~  
└─ basic: git: command not found  
[root@ip-172-31-1-60 ~]$ yum install git  
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd  
amzn2-core  
Resolving Dependencies  
→ Running transaction check  
--> Package git.x86_64 0:2.23.4-1.amzn2.0.1 will be installed  
--> Processing Dependency: perl-Git = 2.23.4-1.amzn2.0.1 for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: git-core-doc = 2.23.4-1.amzn2.0.1 for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: git-core = 2.23.4-1.amzn2.0.1 for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: emacs-common = 2.23.4-1.amzn2.0.1 for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: perl(Tk) for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: perl(Git::I18N) for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: perl(Git) for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Processing Dependency: libsecret-1.so.0 (64bit) for package: git-2.23.4-1.amzn2.0.1.x86_64  
--> Running transaction check  
--> Package emacs-filesystem.noarch 1:25.3-3.amzn2.0.2 will be installed  
--> Package git.x86_64 0:2.23.4-1.amzn2.0.1 will be installed  
--> Package git-core-doc.noarch 0:2.23.4-1.amzn2.0.1 will be installed  
--> Package libsecret.x86_64 0:0.18.5-2.amzn2.0.2 will be installed  
--> Package perl-git.noarch 0:2.23.4-1.amzn2.0.1 will be installed  
--> Processing Dependency: perl(Error) for package: perl-Git-2.23.4-1.amzn2.0.1.noarch  
--> Processing Dependency: perl-TermReadKey.x86_64 0:2.30-20.amzn2.0.2 will be installed  
--> Running transaction check  
--> Package perl-TermReadKey.noarch 1:0.17020-2.amzn2 will be installed  
--> Finished dependency resolution  
  
Dependencies Resolved  
  
=====  
           Package          Arch        Version       Repository    Size  
=====  
Installing:  
git                  x86_64      2.23.4-1.amzn2.0.1      amzn2-core      135 k  
Installing for dependencies:  
emacs-filesystem      noarch     1:25.3-3.amzn2.0.2      amzn2-core      64 k  
git-core              x86_64      2.23.4-1.amzn2.0.1      amzn2-core      5.0 M  
git-core-doc          noarch     2.23.4-1.amzn2.0.1      amzn2-core      2.4 M  
libsecret             x86_64      0.18.5-2.amzn2.0.2      amzn2-core      153 k  
perl-error            noarch     1:0.17020-2.amzn2      amzn2-core      32 k  
perl-git              noarch     2.23.4-1.amzn2.0.1      amzn2-core      47 k  
perl-termreadkey     x86_64      2.30-20.amzn2.0.2      amzn2-core      31 k  
  
Transaction Summary  
=====  
Install 1 Package (+7 Dependent packages)  
Total download size: 7.9 M  
Installed size: 41 M  
Is this ok [y/N]:
```

```

root@ip-172-31-1-60:~# perl-TermReadKey.x86_64 2.30-20.amzn2.0.2 amzn2-core
Transaction Summary
=====
Install 1 Package (+7 Dependent packages)

Total download size: 7.9 M
Installed size: 41 M
Is this ok [y/N]: y
Downloading packages:
(1/9): emacs-filesystem-25.3-3.amzn2.0.2.noarch.rpm | 64 kB 00:00:00
(2/9): git-2.23.4-1.amzn2.0.1.x86_64.rpm | 135 kB 00:00:00
(3/9): git-core-doc-2.23.4-1.amzn2.0.1.noarch.rpm | 2.4 MB 00:00:00
(4/9): git-core-2.23.4-1.amzn2.0.1.x86_64.rpm | 5.0 MB 00:00:00
(5/9): libsecret-0.18.5-2.amzn2.0.2.x86_64.rpm | 153 kB 00:00:00
(6/9): perl-Error-0.17020-2.amzn2.noarch.rpm | 32 kB 00:00:00
(7/9): perl-git-2.23.4-1.amzn2.0.1.noarch.rpm | 47 kB 00:00:00
(8/9): perl-TermReadKey-2.30-20.amzn2.0.2.x86_64.rpm | 31 kB 00:00:00
Total
Running transaction check
Running transaction test
Transaction test succeeded
Transferring transaction
  Installing : git-core-2.23.4-1.amzn2.0.1.x86_64 1/8
  Installing : git-core-doc-2.23.4-1.amzn2.0.1.noarch 2/8
  Installing : 1:emacs-filesystem-25.3-3.amzn2.0.2.noarch 3/8
  Installing : 1:perl-Error-0.17020-2.amzn2.noarch 4/8
  Installing : perl-TermReadKey-2.30-20.amzn2.0.2.x86_64 5/8
  Installing : libsecret-0.18.5-2.amzn2.0.2.x86_64 6/8
  Installing : perl-Git-2.23.4-1.amzn2.0.1.noarch 7/8
  Installing : git-2.23.4-1.amzn2.0.1.x86_64 8/8
  Verifying : libsecret-0.18.5-2.amzn2.0.2.x86_64 1/8
  Verifying : perl-TermReadKey-2.30-20.amzn2.0.2.x86_64 2/8
  Verifying : git-2.23.4-1.amzn2.0.1.x86_64 3/8
  Verifying : perl-Git-2.23.4-1.amzn2.0.1.noarch 4/8
  Verifying : git-core-2.23.4-1.amzn2.0.1.x86_64 5/8
  Verifying : 1:perl-Error-0.17020-2.amzn2.noarch 6/8
  Verifying : 1:emacs-filesystem-25.3-3.amzn2.0.2.noarch 7/8
  Verifying : perl-TermReadKey-2.30-20.amzn2.0.2.x86_64 8/8
Installed:
  git.x86_64 0:2.23.4-1.amzn2.0.1
Dependency Installed:
  emacs-filesystem.noarch 1:25.3-3.amzn2.0.2           git.core.x86_64 0:2.23.4-1.amzn2.0.1
  perl-Error.noarch 1:0.17020-2.amzn2                  git.core-doc.noarch 0:2.23.4-1.amzn2.0.1
                                                               perl-Git.noarch 0:2.23.4-1.amzn2.0.1
                                                               libsecret.x86_64 0:0.18.5-2.amzn2.0.2
Complete!
[root@ip-172-31-1-60 ~]#

```

Again checking the git version

```

[root@ip-172-31-1-60 ~]# git --version
git version 2.23.4
[root@ip-172-31-1-60 ~]#

```

Create a folder

Go to inside the folder

```

[root@ip-172-31-1-60 ~]#
[root@ip-172-31-1-60 ~]# mkdir day1
[root@ip-172-31-1-60 ~]# cd day1/
[root@ip-172-31-1-60 day1]#

```

**ls** - ls will show all the list inside the folder

**ls -a** will show all the hidden files inside the folder

```

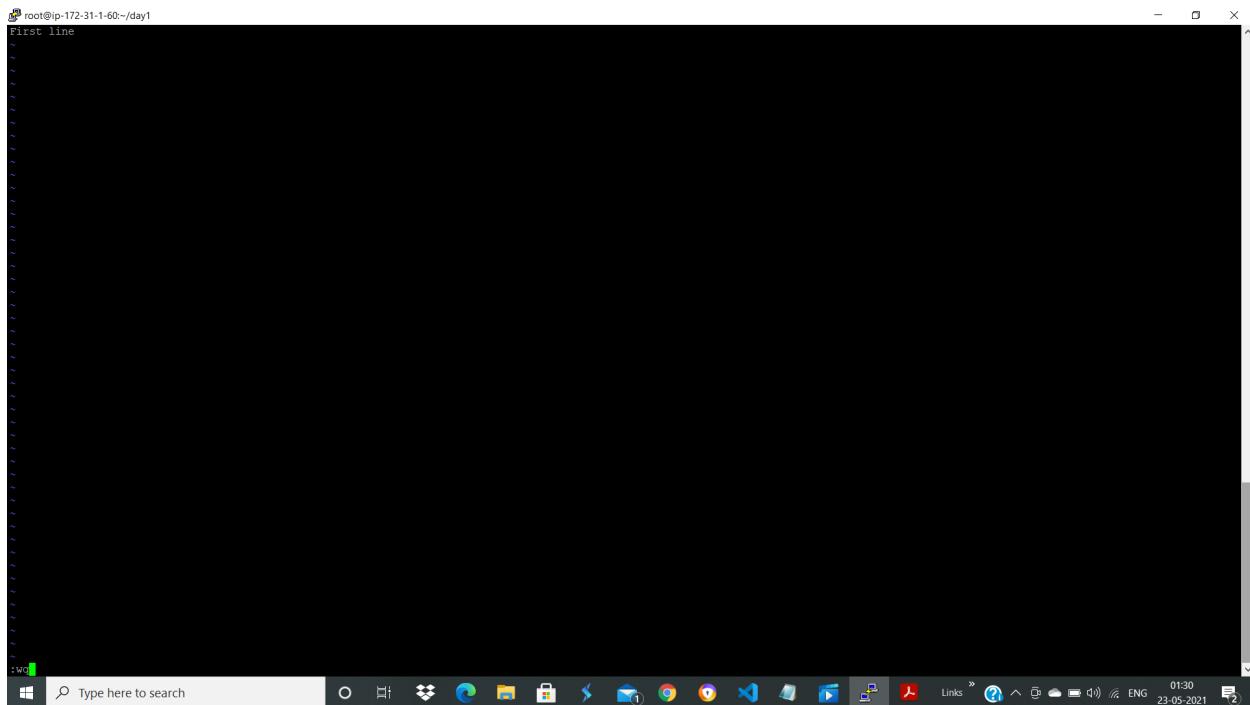
[root@ip-172-31-1-60 day1]# ls
[root@ip-172-31-1-60 day1]# ls -a
. ..
[root@ip-172-31-1-60 day1]#

```

## git init

This creates a new subdirectory named .git that contains all of your necessary repository files - a Git repository skeleton. At this point, nothing in your project is tracked yet.

```
[root@ip-172-31-1-60 day1]# git init
Initialized empty Git repository in /root/day1/.git/
[root@ip-172-31-1-60 day1]# ls
[root@ip-172-31-1-60 day1]# ls -a
. .. .git
[root@ip-172-31-1-60 day1]# cd .git/
[root@ip-172-31-1-60 .git]# ls
branches config description HEAD hooks info objects refs
[root@ip-172-31-1-60 .git]# cd ..
[root@ip-172-31-1-60 day1]# vi test
```



**cat test - this command will give the inside file information**

```
[root@ip-172-31-1-60 day1]# cat test
First line
[root@ip-172-31-1-60 day1]#
```

**git status -s**

```
[root@ip-172-31-1-60 day1]# git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    test

nothing added to commit but untracked files present (use "git add" to track)
[root@ip-172-31-1-60 day1]# git status -s
?? test
[root@ip-172-31-1-60 day1]#
```

**there is no proper hostname to check who is committing the code  
by default it takes root user as username and hostname**

```
[root@ip-172-31-1-60 day1]# git add test
[root@ip-172-31-1-60 day1]# git status -s
A test
[root@ip-172-31-1-60 day1]# git commit -m "First Commit"
[master (root-commit) 414452f] First Commit
Committer: root <root@ip-172-31-1-60.us-east-2.compute.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

  git config --global --edit

After doing this, you may fix the identity used for this commit with:

  git commit --amend --reset-author

1 file changed, 1 insertion(+)
 create mode 100644 test
[root@ip-172-31-1-60 day1]#
```

**git config --global user.name "Srinithya"  
git config --global user.email "srinithya79@gmail.com"**

```
[root@ip-172-31-1-60 day1]# git config --global user.name "Srinithya"
[root@ip-172-31-1-60 day1]# git config --global user.email "srinithya79@gmail.com"
[root@ip-172-31-1-60 day1]# vi test
```

```
root@ip-172-31-1-60:~/day1
First line
Second line
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
 
:wc
```



```
[root@ip-172-31-1-60 day1]# vi test
[root@ip-172-31-1-60 day1]# git status -s
 M test
[root@ip-172-31-1-60 day1]# git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   test

no changes added to commit (use "git add" and/or "git commit -a")
[root@ip-172-31-1-60 day1]# git add test
[root@ip-172-31-1-60 day1]# git status -s
M test
[root@ip-172-31-1-60 day1]# git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   test

[root@ip-172-31-1-60 day1]#
```

**Now from staging area to need to do the commit**

**When working directory and local repo is same in condition means, the output will be empty**

```
[root@ip-172-31-1-60 day1]# git commit -m "Second commit"
[master 99683ac] Second commit
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day1]# git status -s
[root@ip-172-31-1-60 day1]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-1-60 day1]# git log
commit 99683acd316b0c5638d2c61d10259a61021175a (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 20:24:16 2021 +0000

    Second commit

commit 414452f8cc027b89496d0e51db669b4c84fd1fdc
Author: root <root@ip-172-31-1-60.us-east-2.compute.internal>
Date:   Sat May 22 20:09:34 2021 +0000

    First Commit
[root@ip-172-31-1-60 day1]# git status -s
[root@ip-172-31-1-60 day1]# git push
fatal: No configured push destination.
Either specify the URL from the command-line or configure a remote repository using

    git remote add <name> <url>

and then push using the remote name

    git push <name>

[root@ip-172-31-1-60 day1]# git remote add alpha https://github.com/srinithya79/DevOps_git.git
[root@ip-172-31-1-60 day1]# git remote
alpha
[root@ip-172-31-1-60 day1]# git push alpha
fatal: The current branch master has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream alpha master

[root@ip-172-31-1-60 day1]# git push alpha master
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com': [REDACTED]
```

```
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com':
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 457 bytes | 457.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0)
To https://github.com/srinithya79/DevOps_git.git
 * [new branch]      master -> master
[root@ip-172-31-1-60 day1]# [REDACTED]
```

github.com/srinithya79/DevOps\_git/commit/99683acd316b0c5638d2c61d10259a61021175a

srinithya79 / DevOps\_git

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Second commit

master

srinithya79 committed 22 minutes ago

Showing 1 changed file with 1 addition and 0 deletions.

Unified Split

1 1 @@ -1 +1,2 @@

1 First line

+ Second line

0 comments on commit 99683ac

Write Preview

Leave a comment

Attach files by dragging & dropping, selecting or pasting them.

```
root@ip-172-31-1-60:~/day1
First line
Second line
Third line
~
```

Type here to search

Links 02:19 ENG 23-05-2021

```
[root@ip-172-31-1-60 day1]# vi test
[root@ip-172-31-1-60 day1]# git status -s
 M test
[root@ip-172-31-1-60 day1]# git add test
[root@ip-172-31-1-60 day1]# git status -s
M test
[root@ip-172-31-1-60 day1]# git commit -m "Third Commit"
[master 9f22a9c] Third Commit
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day1]# git log
commit 9f22a9c25c0ef4e5865027dbd0be7671bb8504c0 (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 20:50:31 2021 +0000

    Third Commit

commit 99683acdf316b0c5638d2c61d10259a61021175a (alpha/master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 20:24:16 2021 +0000

    Second commit

commit 414452f8cc027b89496d0e51db669b4c84fd1fdc
Author: root <root@ip-172-31-1-60.us-east-2.compute.internal>
Date:   Sat May 22 20:09:34 2021 +0000

    First Commit
[root@ip-172-31-1-60 day1]# git push alpha master
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 263 bytes | 263.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/srinithya79/DevOps_git.git
  99683ac..9f22a9c  master -> master
[root@ip-172-31-1-60 day1]#
```

## MERGE

```
 root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 ~]# mkdir day2
[root@ip-172-31-1-60 ~]# cd day2
[root@ip-172-31-1-60 day2]# git --version
git version 2.23.4
[root@ip-172-31-1-60 day2]# git init
Initialized empty Git repository in /root/day2/.git/
[root@ip-172-31-1-60 day2]# vi test
```

```
root@ip-172-31-1-60:~/day2
First line
Second line
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
 
[1w] Type here to search    O    H    E    F    G    S    M    V    L    R    Links    Q    ^    D    C    ENG    02:37    23-05-2021
```

```
root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 ~]# mkdir day2
[root@ip-172-31-1-60 ~]# cd day2
[root@ip-172-31-1-60 day2]# git --version
git version 2.23.4
[root@ip-172-31-1-60 day2]# git init
Initialized empty Git repository in /root/day2/.git/
[root@ip-172-31-1-60 day2]# vi test
[root@ip-172-31-1-60 day2]# git status -s
?? test
[root@ip-172-31-1-60 day2]# git add test
[root@ip-172-31-1-60 day2]# git status -s
A test
[root@ip-172-31-1-60 day2]# git commit -m "First commit"
[master (root-commit) 0c0dca2] First commit
 1 file changed, 1 insertion(+)
 create mode 100644 test
[root@ip-172-31-1-60 day2]# vi test
[root@ip-172-31-1-60 day2]# git status -s
M test
[root@ip-172-31-1-60 day2]# git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   test

no changes added to commit (use "git add" and/or "git commit -a")
[root@ip-172-31-1-60 day2]# git status -s
A test
[root@ip-172-31-1-60 day2]# git commit -am "Second Commit"git commit -am "Second Commit"
fatal: paths 'commit ..' with -a does not make sense
[root@ip-172-31-1-60 day2]# git commit -am "Second Commit"
[master bdb4a6b261cc7a0a6483b51cb376780e8e722a15] Second Commit
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day2]# git log
commit bdb4a6b261cc7a0a6483b51cb376780e8e722a15 (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

  Second Commit

commit d0c6d2a25c73cacf6bd89dcfa9e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

  First commit
[root@ip-172-31-1-60 day2]#
```

```
Windows Type here to search    O    H    E    F    G    S    M    V    L    R    Links    Q    ^    D    C    ENG    02:42    23-05-2021
```

```
[root@ip-172-31-1-60:~/day2]
[root@ip-172-31-1-60 day2]# git log --oneline
bdbe4a6 (HEAD -> master) Second Commit
d0c6da2 First commit
[root@ip-172-31-1-60 day2]# git branch
* master
[root@ip-172-31-1-60 day2]# git branch dev
[root@ip-172-31-1-60 day2]# git branch
  dev
* master
[root@ip-172-31-1-60 day2]# git checkout dev
Switched to branch 'dev'
[root@ip-172-31-1-60 day2]# git branch
* dev
  master
[root@ip-172-31-1-60 day2]# git log
commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (HEAD -> dev, master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]# git branch
* dev
  master
[root@ip-172-31-1-60 day2]# vi test
```

```
[root@ip-172-31-1-60 day2]# vi test
[root@ip-172-31-1-60 day2]# git add .
[root@ip-172-31-1-60 day2]# git commit -m "Third commit"
[dev f20829a] Third commit
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day2]# git log
commit f20829a08c2177add05200facc11c24f3ab93d54 (HEAD -> dev)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:22:27 2021 +0000

    Third commit

commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

```
[root@ip-172-31-1-60 day2]# cat test
First line
Second line
Third line
[root@ip-172-31-1-60 day2]# git checkout master
Switched to branch 'master'
[root@ip-172-31-1-60 day2]# cat test
First line
Second line
[root@ip-172-31-1-60 day2]# git log
commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

```
[root@ip-172-31-1-60 ~]# ls
[root@ip-172-31-1-60 day2]# ls
test
[root@ip-172-31-1-60 day2]# git remote hfdc https://github.com/srinithya79/dev_git2.git
error: Unknown subcommand: hfdc
usage: git remote [-v | --verbose]
  or: git remote add [-t <branch>] [-m <master>] [-f] [--tags | --no-tags] [--mirror=<fetch|push>] <name> <url>
  or: git remote rename <old> <new>
  or: git remote remove <name>
  or: git remote set-head <name> [<auto> | -d | --delete | <branch>]
  or: git remote [-v | --verbose] show [<name>]
  or: git remote prune [-n | --dry-run] <name>
  or: git remote [-v | --verbose] update [-p | --prune] [<group> | <remote>]...
  or: git remote set-branches [--add] <name> <branch>...
  or: git remote get-url [<-push>] <name>
  or: git remote set-url [<-push>] <name> <newurl> [<oldurl>]
  or: git remote set-url --add <name> <newurl>
  or: git remote set-url --delete <name> <url>

-v, --verbose      be verbose; must be placed before a subcommand
[root@ip-172-31-1-60 day2]# git remote add hfdc https://github.com/srinithya79/dev_git2.git
[root@ip-172-31-1-60 day2]# git remote
hfdc
[root@ip-172-31-1-60 day2]# git push
fatal: No configured push destination.
Either specify the URL from the command-line or configure a remote repository using
  git remote add <name> <url>
and then push using the remote name
  git push <name>
[root@ip-172-31-1-60 day2]# git push hfdc master
fatal: 'hfdc' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
[root@ip-172-31-1-60 day2]#
```

```
root@ip-172-31-1-60:~/day2
  or: git remote set-branches [--add] <name> <branch>...
  or: git remote get-url [-push] [-all] <name>
  or: git remote set-url [-push] <name> <newurl> [<oldurl>]
  or: git remote set-url --add <name> <newurl>
  or: git remote set-url --delete <name> <url>

  -v, --verbose      be verbose; must be placed before a subcommand

[root@ip-172-31-1-60 day2]# git remote add hdfc https://github.com/srinithya79/dev_git2.git
[root@ip-172-31-1-60 day2]# git remote hdfc
[root@ip-172-31-1-60 day2]# git push
fatal: No configured push destination.
Either specify the URL from the command-line or configure a remote repository using

  git remote add <name> <url>
and then push using the remote name

  git push <name>

[root@ip-172-31-1-60 day2]# git push hdfc master
fatal: 'hdfc' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
[root@ip-172-31-1-60 day2]# git remote add hdfc https://github.com/srinithya79/dev_git2.git
[root@ip-172-31-1-60 day2]# git remote hdfc
fatal: 'hdfc' already exists.
[root@ip-172-31-1-60 day2]# git push hdfc master
fatal: 'hdfc' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
[root@ip-172-31-1-60 day2]# git remote add test1 https://github.com/srinithya79/dev_git2.git
[root@ip-172-31-1-60 day2]# git remote test1
hdfc
test1
[root@ip-172-31-1-60 day2]# git push test1 master
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com':
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 445 bytes | 445.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0)
To https://github.com/srinithya79/dev_git2.git
 ! [new branch] master -> master
[root@ip-172-31-1-60 day2]#
```

```
root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 day2]# git log
commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (HEAD -> master, test1/master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

```
[root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 day2]# git checkout dev
Switched to branch 'dev'
[root@ip-172-31-1-60 day2]# git log
commit f20829a08c2177add05200facc11c24f3ab93d54 (HEAD -> dev)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:22:27 2021 +0000

    Third commit

commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (test1/master, master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]# git push test1 dev
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 262 bytes | 262.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'dev' on GitHub by visiting:
remote:     https://github.com/srinithya79/dev_git2/pull/new/dev
remote:
To https://github.com/srinithya79/dev_git2.git
 * [new branch]      dev -> dev
[root@ip-172-31-1-60 day2]# 
```

```
[root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 day2]# git log
commit f20829a08c2177add05200facc11c24f3ab93d54 (HEAD -> dev, test1/dev)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:22:27 2021 +0000

    Third commit

commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (test1/master, master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]# 
```

**To merge first have to checkout the master branch**

```
first commit
[root@ip-172-31-1-60 day2]# git branch
* dev
  master
[root@ip-172-31-1-60 day2]# git checkout master
Switched to branch 'master'
[root@ip-172-31-1-60 day2]# git branch
  dev
* master
[root@ip-172-31-1-60 day2]#
```

**Then need to check the log**

```
[root@ip-172-31-1-60 day2]# git log
commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (HEAD -> master, test1/master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

**Smooth merge**

```
root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 day2]# git merge dev
Updating bdbe4a6..f20829a
Fast-forward
 test | 1 +
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day2]# cat test
First line
Second line
Third line
[root@ip-172-31-1-60 day2]# git log
commit f20829a08c2177add05200fac11c24f3ab93d54 (HEAD -> master, test1/dev, dev)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:22:27 2021 +0000

    Third commit

commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15 (test1/master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

```
root@ip-172-31-1-60:~/day2
[root@ip-172-31-1-60 day2]# git push test1 master
Username for 'https://github.com': srinithya79@gmail.com
Password for 'https://srinithya79@gmail.com@github.com':
Total 0 (delta 0), reused 0 (delta 0)
To https://github.com/srinithya79/dev_git2.git
 bdbe4a6..f20829a master -> master
[root@ip-172-31-1-60 day2]# git log
commit f20829a08c2177add05200fac11c24f3ab93d54 (HEAD -> master, test1/master, test1/dev, dev)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:22:27 2021 +0000

    Third commit

commit bdbe4a6b261cc7a0a6483b51cb3767808e722a15
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:11:30 2021 +0000

    Second Commit

commit d0c6da2a5c73cac46bd89dcfa8e565f5c05bf0e2
Author: Srinithya <srinithya79@gmail.com>
Date:   Sat May 22 21:06:22 2021 +0000

    First commit
[root@ip-172-31-1-60 day2]#
```

## Hidden branches

```
[root@ip-172-31-1-60 day2]# git branch
  dev
* master
[root@ip-172-31-1-60 day2]# git branch -a
  dev
* master
  remotes/test1/dev
  remotes/test1/master
[root@ip-172-31-1-60 day2]# █
```

## git command modes

??	untracked	
A	Added	git add
M (red)		
M (green)		
-		

## MERGE CONFLICT

```
root@ip-172-31-1-60:~/day2.2
[root@ip-172-31-1-60 ~]# mkdir day2.2
[root@ip-172-31-1-60 ~]# cd day2.2/
[root@ip-172-31-1-60 day2.2]# git init
Initialized empty Git repository in /root/day2.2/.git/
[root@ip-172-31-1-60 day2.2]# vi test
[root@ip-172-31-1-60 day2.2]# git status -s
?? test
[root@ip-172-31-1-60 day2.2]# git add .
[root@ip-172-31-1-60 day2.2]# git commit -m "First commit"
[master (root-commit) f86b769] First commit
 1 file changed, 1 insertion(+)
 create mode 100644 test
[root@ip-172-31-1-60 day2.2]# git status -s
[root@ip-172-31-1-60 day2.2]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-1-60 day2.2]# git log
commit f86b76906a0711ec4c683085d37a878604b4bb44 (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

        First commit
[root@ip-172-31-1-60 day2.2]# vi test
[root@ip-172-31-1-60 day2.2]# git status -s
 M test
[root@ip-172-31-1-60 day2.2]# git add .
[root@ip-172-31-1-60 day2.2]# git status -s
 M test
[root@ip-172-31-1-60 day2.2]# git commit -m "second commit"
[master 9ee0149] second commit
 1 file changed, 1 insertion(+)
[root@ip-172-31-1-60 day2.2]# git status -s
[root@ip-172-31-1-60 day2.2]# git status
On branch master
nothing to commit, working tree clean
[root@ip-172-31-1-60 day2.2]# git log
commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4 (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000

        second commit

commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

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



root@ip-172-31-1-60:~/day2.2

```
second commit

commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

    First commit
[root@ip-172-31-1-60 day2.2]# git branch dev1
[root@ip-172-31-1-60 day2.2]# git branch
  dev1
* master
[root@ip-172-31-1-60 day2.2]# git checkout dev1
Switched to branch 'dev1'
[root@ip-172-31-1-60 day2.2]# vi test
[root@ip-172-31-1-60 day2.2]# cat test
First line
Second line
Third line
[root@ip-172-31-1-60 day2.2]# git status -s
 M test
[root@ip-172-31-1-60 day2.2]#
[root@ip-172-31-1-60 day2.2]# git commit -am "Third commit"
[dev1 32ee560] Third commit
 1 file changed, 2 insertions(+), 2 deletions(-)
[root@ip-172-31-1-60 day2.2]# git log
commit 32ee560e0819b870b593a4a6bc67e2dc33150294 (HEAD -> dev1)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:52:13 2021 +0000

    Third commit

commit 0ffc5617fb24a62eda9d3c158b4168c11f84e399 (master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:46:04 2021 +0000

    Third commit

commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000

    second commit

commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

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



Type here to search



```
root@ip-172-31-1-60:~/day2.2
[root@ip-172-31-1-60 day2.2]# git checkout master
Switched to branch 'master'
[root@ip-172-31-1-60 day2.2]# vi test
[root@ip-172-31-1-60 day2.2]# git commit -am "3rd commit"
[master cdd4114] 3rd commit
 1 file changed, 1 insertion(+), 1 deletion(-)
[root@ip-172-31-1-60 day2.2]# git log
commit cdd41144d731ea26bc07920e7a82da94061ce68c (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:57:28 2021 +0000

 3rd commit

commit 0ffc5617fb24a62eda9d3c158b4168c11f84e399
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:46:04 2021 +0000

  Third commit

commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000

  second commit

commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

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

### Before merging we have to check 2 rules

1. Check branch
2. Check log

```
root@ip-172-31-1-60:~/day2.2
```

```
[root@ip-172-31-1-60 day2.2]# git checkout devel
Switched to branch 'devel'
[root@ip-172-31-1-60 day2.2]# git log
commit 32ee560e0819b870b593a4a6bc67e2dc33150294 (HEAD -> devel)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:52:13 2021 +0000
```

```
Third commit
```

```
commit 0fffc5617fb24a62eda9d3c158b4168c11f84e399
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:46:04 2021 +0000
```

```
Third commit
```

```
commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000
```

```
second commit
```

```
commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000
```

```
First commit
```

```
[root@ip-172-31-1-60 day2.2]# git branch
* devel
  master
[root@ip-172-31-1-60 day2.2]# git checkout master
Switched to branch 'master'
[root@ip-172-31-1-60 day2.2]# █
```

```
root@ip-172-31-1-60:~/day2.2
[root@ip-172-31-1-60 day2.2]# git log
commit cdd41144d731ea26bc07920e7a82da94061ce68c (HEAD -> master)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:57:28 2021 +0000

    3rd commit

commit 0fffc5617fb24a62eda9d3c158b4168c11f84e399
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:46:04 2021 +0000

    Third commit

commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000

    second commit

commit f86b76906a0711ec4c683085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

    First commit
[root@ip-172-31-1-60 day2.2]# git branch
  dev1
* master
[root@ip-172-31-1-60 day2.2]# git merge dev1
Auto-merging test
CONFLICT (content): Merge conflict in test
Automatic merge failed; fix conflicts and then commit the result.
[root@ip-172-31-1-60 day2.2]#
```

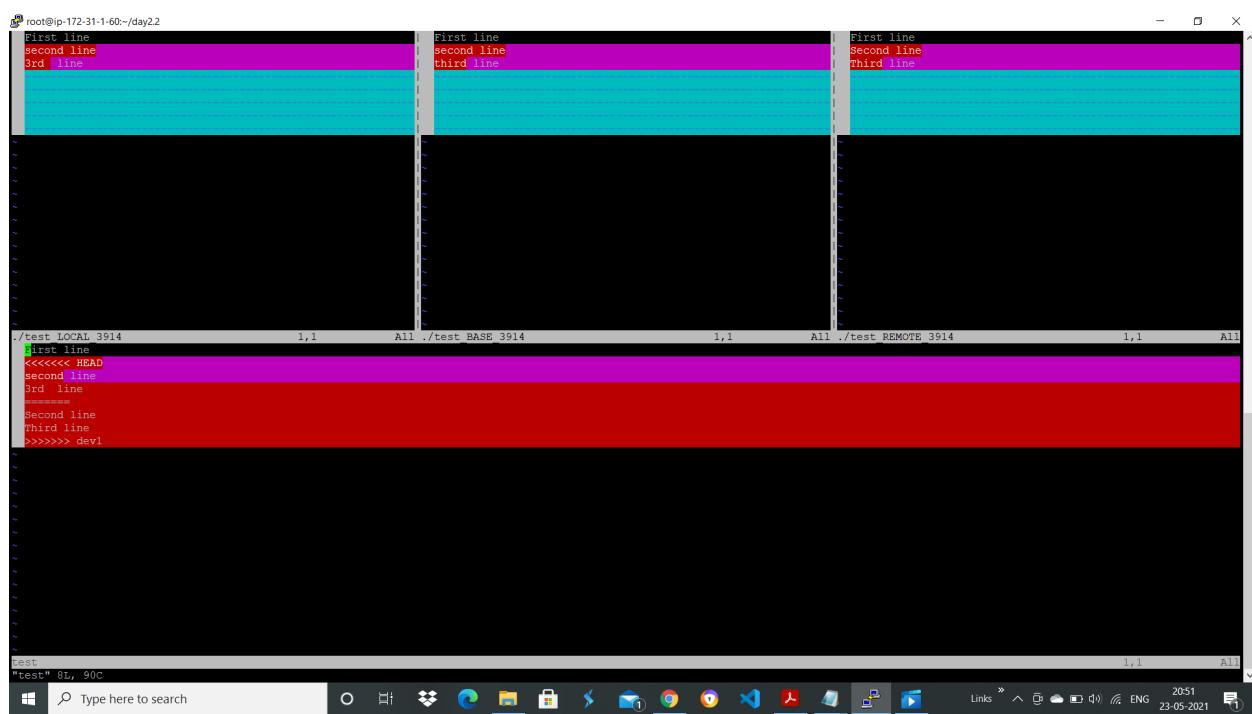
## Fixing the conflict

```
root@ip-172-31-1-60:~/day2.2
[root@ip-172-31-1-60 day2.2]# cat test
First line
<<<<< HEAD
second line
3rd line
=====
Second line
Third line
>>>>> dev1
[root@ip-172-31-1-60 day2.2]# git branch
  dev1
* master
[root@ip-172-31-1-60 day2.2]#
```

## Configuration needed for Merge the file between diff branches:

```
git config --global merge.tool vimdiff  
git config --global merge.conflictstyle diff3  
git config --global mergetool.prompt false
```

```
[root@ip-172-31-1-60 day2.2]# git config --global merge.tool vimdiff  
[root@ip-172-31-1-60 day2.2]# git config --global merge.conflictstyle diff3  
[root@ip-172-31-1-60 day2.2]# git config --global mergetool.prompt false  
[root@ip-172-31-1-60 day2.2]# git mergetool
```



**Ctrl+shift+ww -- to rotate the boxes**

**:diffg RE**

**Shift+enter**

```
root@ip-172-31-1-60:~/day2.2
First line
Second line
Third line

First line
second line
third line

First line
Second line
Third line

./test LOCAL 3914 [*]           2,1          All ./test BASE 3914          2,1          All ./test REMOTE 3914          2,1          All
First line
<<<<< HEAD
second line
3rd line
=====
Second line
Third line
>>>>> dev1

test
:diffg RE
2,1          All
Type here to search  Links  2057
ENG 23-05-2021
```

```
[root@ip-172-31-1-60:~/day2.2]# cat test
First line
<<<<< HEAD
Second line
3rd line
=====
Second line
Third line
>>>>> dev1
[root@ip-172-31-1-60 day2.2]# git branch
  dev1
* master
[root@ip-172-31-1-60 day2.2]# git config --global merge.tool vimdiff
[root@ip-172-31-1-60 day2.2]# git config --global merge.conflictstyle diff3
[root@ip-172-31-1-60 day2.2]# git config --global mergetool.prompt false
[root@ip-172-31-1-60 day2.2]# git mergetool
Merging:
test

Normal merge conflict for 'test':
 (local): modified file
 (remote): modified file
4 files to edit
[root@ip-172-31-1-60 day2.2]# cat test
First line
<<<<< HEAD
second line
3rd line
=====
Second line
Third line
>>>>> dev1
[root@ip-172-31-1-60 day2.2]# git mergetool
No files need merging
[root@ip-172-31-1-60 day2.2]# cat test
First line
<<<<< HEAD
second line
3rd line
=====
Second line
Third line
>>>>> dev1
[root@ip-172-31-1-60 day2.2]# ls -lrt
total 1
-rw-r--r-- 1 root root 90 May 23 15:08 test.orig
-rw-r--r-- 1 root root 90 May 23 15:21 test
[root@ip-172-31-1-60 day2.2]#
```

```
root@ip-172-31-1-60:~/day2.2
=====
Second line
>>>>> dev1
[root@ip-172-31-1-60 day2.2]# rm -f test.orig
[root@ip-172-31-1-60 day2.2]# ls -lrt
total 4
-rw-r--r-- 1 root root 90 May 23 15:21 test
[root@ip-172-31-1-60 day2.2]# git status -s
M test
[root@ip-172-31-1-60 day2.2]# git commit -m "resolved the issues"
[master 7bd4d2a] resolved the issues
[root@ip-172-31-1-60 day2.2]# git log
commit 7bd4d2a40524e2b5850d255d2c41ca2f019badfba (HEAD -> master)
Merge: cdd4114 32ee560
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 15:40:14 2021 +0000

    resolved the issues

commit cdd4114d731ea26bd07920e7a82d494061ce68c
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:57:28 2021 +0000

    3rd commit

commit 32ee560e0019b070b593a4a6b67e2dc33150294 (dev1)
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:52:13 2021 +0000

    Third commit

commit 0ffc5617fb24a62eda9d3c158b4168c11f84e399
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:46:04 2021 +0000

    Third commit

commit 9ee0149cab02cfbe7770091ef2ad2b3173c683b4
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 14:41:47 2021 +0000

    second commit

commit f86b76906a0711ec6c603085d37a878604b4bb44
Author: Srinithya <srinithya79@gmail.com>
Date:   Sun May 23 13:42:58 2021 +0000

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

```
[root@ip-172-31-1-60 day2.2]# git log --oneline
7b4d2a4 (HEAD -> master) 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]#
```

## **REBASE**