

# Git revert

- ➔ The revert command helps you undo an existing commit.
- ➔ It does not delete any data in this process instead rather git creates a new commit with the included files reverted to their previous state so your version control history moves forward while the state of your files moves backward.

## Difference between reset and revert

**Reset** -> we use reset command before commit

**Revert** -> we use revert command after commit

**git status**

**cat > newfile** {create one new file }  
**hi, final code for app**

**git add**

**git commit -m "I am demo"**

**git log --oneline**

**git revert <commit -id >**

```

root@ip-172-31-43-31:/home/ubuntu/satyam# cat >>revertfile.txt
hello satyam this is a revert file
root@ip-172-31-43-31:/home/ubuntu/satyam# cat revertfile.txt
hello satyam this is a revert file
root@ip-172-31-43-31:/home/ubuntu/satyam# git add .
root@ip-172-31-43-31:/home/ubuntu/satyam# git commit -m " 1st time revert file commit"
[master 55f93e5] 1st time revert file commit
Committer: root <root@ip-172-31-43-31.ap-south-1.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 revertfile.txt
root@ip-172-31-43-31:/home/ubuntu/satyam# git status
On branch master
nothing to commit, working tree clean
root@ip-172-31-43-31:/home/ubuntu/satyam# gt log
Command 'gt' not found, but can be installed with:

apt install genomertools

root@ip-172-31-43-31:/home/ubuntu/satyam# git log
commit 55f93e50090923626152b60900a1203e7164abb2 (HEAD -> master)
Author: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
Date: Mon Oct 18 13:29:20 2021 +0000

    1st time revert file commit

```

```

root@ip-172-31-43-31:/home/ubuntu/satyam# cat >revertfile.txt
Hello satyam tripathi this is your again revert file
root@ip-172-31-43-31:/home/ubuntu/satyam# git add .
root@ip-172-31-43-31:/home/ubuntu/satyam# git commit -m "2 nd tme revert file commit"
[master 6c8b9fe] 2 nd tme revert file commit
Committer: root <root@ip-172-31-43-31.ap-south-1.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(+), 1 deletion(-)
root@ip-172-31-43-31:/home/ubuntu/satyam# git log
commit 6c8b9feaeace64ab5a4938c2fa71b01a4213785c (HEAD -> master)
Author: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
Date: Mon Oct 18 13:35:55 2021 +0000

    2 nd tme revert file commit

commit 55f93e50090923626152b60900a1203e7164abb2
Author: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
Date: Mon Oct 18 13:29:20 2021 +0000

    1st time revert file commit

```

```

this is a demo file
root@ip-172-31-43-31:/home/ubuntu/satyam# cat revertfile.txt
Hello satyam tripathi this is your again revert file

```

```

root@ip-172-31-43-31:/home/ubuntu/satyam# git revert 6c8b9feaeace64ab5a4938c2fa71b01a4213785c
[master 799efce] Revert "2 nd tme revert file commit" please ignore this commit
Committer: root <root@ip-172-31-43-31.ap-south-1.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(+), 1 deletion(-)
root@ip-172-31-43-31:/home/ubuntu/satyam#

```

```

root@ip-172-31-43-31:/home/ubuntu/satyam
GNU nano 4.8 /home/ubuntu/satyam/.git/COMMIT_EDITMSG
Revert "2 nd tme revert file commit" please ignore this commit.

This reverts commit 6c8b9feaeace64ab5a4938c2fa71b01a4213785c.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Committer: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
#
# On branch master
# Changes to be committed:
#   modified:   revertfile.txt
#

root@ip-172-31-43-31:/home/ubuntu/satyam# cat revertfile.txt
hello satyam this is a revert file
root@ip-172-31-43-31:/home/ubuntu/satyam#

```

## How to remove untracked files

**git clean -n** (they ask you before removing your files )

**git clean -f** ( delete files forcefully )

```

root@ip-172-31-43-31:/home/ubuntu/satyam# touch hello.txt hello1.txt hello2.txt
root@ip-172-31-43-31:/home/ubuntu/satyam# ls
HEAD  branches  config  description  hello.txt  hello1.txt  hello2.txt  hooks  info  objects  refs  revertfile.txt  tripathi1.txt
root@ip-172-31-43-31:/home/ubuntu/satyam#
root@ip-172-31-43-31:/home/ubuntu/satyam# git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.txt
        hello1.txt
        hello2.txt

nothing added to commit but untracked files present (use "git add" to track)
root@ip-172-31-43-31:/home/ubuntu/satyam# git clean -n
Would remove hello.txt
Would remove hello1.txt
Would remove hello2.txt
root@ip-172-31-43-31:/home/ubuntu/satyam# git clean -f
Removing hello.txt
Removing hello1.txt
Removing hello2.txt
root@ip-172-31-43-31:/home/ubuntu/satyam# ls
HEAD  branches  config  description  hooks  info  objects  refs  revertfile.txt  tripathi1.txt
root@ip-172-31-43-31:/home/ubuntu/satyam#

```

## GIT TAG

- ➔ Tag operations allows giving meaningful to a specific version in a repository.
- ➔ If you want to apply tag in your commit you use tag command .

### To apply tag:-

```
git tag -a <tagname> -m <message what you want><commit -ID>
```

### To see all the list of the tags :-

```
git tag
```

### To see particular Commit Content by using tag :-

```
git show <tagname>
```

### To delete a tag :-

```
git tag -d <tagname>
```

```
root@ip-172-31-43-31: /home/ubuntu/satyam
root@ip-172-31-43-31:/home/ubuntu/satyam# git log --oneline
799efce (HEAD -> master) Revert "2 nd tme revert file commit" please ignore this commit
6c8b9fe 2 nd tme revert file commit
55f93e5 1st time revert file commit
6712b2a (satyam1) this is a demo file
root@ip-172-31-43-31:/home/ubuntu/satyam# git tag
root@ip-172-31-43-31:/home/ubuntu/satyam# git tag -a satyamtag1 -m "this is 1 st tag "55f93e5
root@ip-172-31-43-31:/home/ubuntu/satyam# git tag
satyamtag1
root@ip-172-31-43-31:/home/ubuntu/satyam# git show satyamtag1
tag satyamtag1
Tagger: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
Date: Mon Oct 18 14:04:00 2021 +0000

this is 1 st tag 55f93e5

commit 799efce90798673954cd72183c3e34a9b3c2c6c4 (HEAD -> master, tag: satyamtag1)
Author: root <root@ip-172-31-43-31.ap-south-1.compute.internal>
Date: Mon Oct 18 13:39:35 2021 +0000

    Revert "2 nd tme revert file commit" please ignore this commit

    This reverts commit 6c8b9feaeace64ab5a4938c2fa71b01a4213785c.

diff --git a/revertfile.txt b/revertfile.txt
index 936d59b..75e5623 100644
--- a/revertfile.txt
+++ b/revertfile.txt
@@ -1,1 +1,1 @@
-Hello satyam tripathi this is your again revert file
+hello satyam this is a revert file
root@ip-172-31-43-31:/home/ubuntu/satyam#
```

## Git Clone

- ➔ Open github website
  - ➔ Login and chose existing directory
  - ➔ Now, go to your linux machine and run command
  - ➔ `git clone < url of git repository>`
- 
- ➔ it creates a loca repo automatically linux machine with the same name as in github account .