

## Uninstalling git :

```
dell@dell-Latitude-7490: ~  
dell@dell-Latitude-7490:~$ sudo apt-get remove git  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  git-man liberror-perl libfwupdplugin1  
Use 'sudo apt autoremove' to remove them.  
The following packages will be REMOVED:  
  git  
0 upgraded, 0 newly installed, 1 to remove and 94 not upgraded.  
After this operation, 36.6 MB disk space will be freed.  
Do you want to continue? [Y/n] y  
(Reading database ... 202057 files and directories currently installed.)  
Removing git (1:2.25.1-1ubuntu3.5) ...  
dell@dell-Latitude-7490:~$
```

## Installing git :

```
dell@dell-Latitude-7490:~$ sudo apt install git  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following package was automatically installed and is no longer required:  
  libfwupdplugin1  
Use 'sudo apt autoremove' to remove it.  
Suggested packages:  
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk  
  gitweb git-cvs git-mediawiki git-svn  
The following NEW packages will be installed:  
  git  
0 upgraded, 1 newly installed, 0 to remove and 94 not upgraded.  
Need to get 4,557 kB of archives.  
After this operation, 36.6 MB of additional disk space will be used.  
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 git amd64 1:2.25.1-1ubuntu3.5 [4,557 kB]  
Fetched 4,557 kB in 2s (2,509 kB/s)  
Selecting previously unselected package git.  
(Reading database ... 201310 files and directories currently installed.)  
Preparing to unpack .../git_1%3a2.25.1-1ubuntu3.5_amd64.deb ...  
Unpacking git (1:2.25.1-1ubuntu3.5) ...  
Setting up git (1:2.25.1-1ubuntu3.5) ...  
dell@dell-Latitude-7490:~$
```

## Initializing git

```
dell@dell-Latitude-7490: ~/work/gitFinal  
dell@dell-Latitude-7490:~/work/gitFinal$ git init  
Initialized empty Git repository in /home/dell/work/gitFinal/.git/  
dell@dell-Latitude-7490:~/work/gitFinal$
```

```
dell@dell-Latitude-7490:~/work/gitFinal$ #STAGING FILES
dell@dell-Latitude-7490:~/work/gitFinal$ code index.html style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git add .
dell@dell-Latitude-7490:~/work/gitFinal$ # 2 FILES STAGED
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

```
dell@dell-Latitude-7490:~/work/gitFinal$ # VIEWING GIT STATUS
dell@dell-Latitude-7490:~/work/gitFinal$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   index.html
    new file:   style.css

dell@dell-Latitude-7490:~/work/gitFinal$ git status -s #Status in short form
A index.html
A style.css
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

## GIT COMMIT

```
dell@dell-Latitude-7490:~/work/gitFinal$ git commit -m "html and css files for website"
[master (root-commit) f7c667f] html and css files for website
 2 files changed, 12 insertions(+)
 create mode 100644 index.html
 create mode 100644 style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
f7c667f (HEAD -> master) html and css files for website
```

## --amend

```
dell@dell-Latitude-7490:~/work/gitFinal$ git commit --amend -m "HTML and CSS files for website"
[master eac0c70] HTML and CSS files for website
Date: Thu Sep 15 21:09:07 2022 +0530
 2 files changed, 12 insertions(+)
 create mode 100644 index.html
 create mode 100644 style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
eac0c70 (HEAD -> master) HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

## Skipping the staging area

```
dell@dell-Latitude-7490:~/work/gitFinal$ code index.html
dell@dell-Latitude-7490:~/work/gitFinal$ git s
M index.html
dell@dell-Latitude-7490:~/work/gitFinal$ git commit -am "html without adding is committed"
[master f2db8fd] html without adding is committed
 1 file changed, 1 insertion(+), 1 deletion(-)
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

## Removing files

```
dell@dell-Latitude-7490:~/work/gitFinal$ git rm style.css
rm 'style.css'
dell@dell-Latitude-7490:~/work/gitFinal$ git s
D style.css
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

## Viewing the staged/unstaged changes

```
dell@dell-Latitude-7490:~/work/gitFinal$ git s
M index.html
D style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git diff --staged
diff --git a/style.css b/style.css
deleted file mode 100644
index e69de29..0000000
dell@dell-Latitude-7490:~/work/gitFinal$ git diff --cached
diff --git a/style.css b/style.css
deleted file mode 100644
index e69de29..0000000
dell@dell-Latitude-7490:~/work/gitFinal$ git difftool

Viewing (1/1): 'index.html'
Launch 'vscode' [Y/n]? y
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Viewing the history

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log
commit 4bf2140d6f94ec0e843762784e55314a9fdad956 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:18:19 2022 +0530

    Index feature implemented

commit f2db8fd63d21cfa06c44b0a66c47565a93c2834a
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:13:48 2022 +0530

    html without adding is committed

commit eac0c704be125a810153e6bfc461eee52fef3c43
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:09:07 2022 +0530

    HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
4bf2140 (HEAD -> master) Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Viewing a commit

```
dell@dell-Latitude-7490:~/work/gitFinal$ git show HEAD~1
commit f2db8fd63d21cfa06c44b0a66c47565a93c2834a
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:13:48 2022 +0530

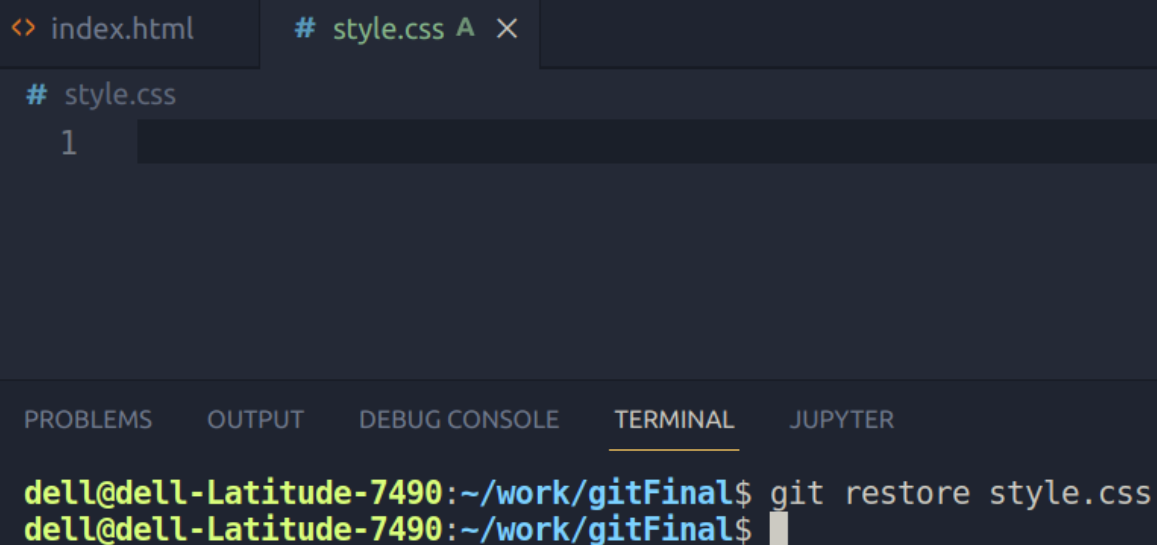
    html without adding is committed

diff --git a/index.html b/index.html
index 56efbdb..08c6446 100644
--- a/index.html
+++ b/index.html
@@ -4,7 +4,7 @@
     <meta charset="UTF-8">
     <meta http-equiv="X-UA-Compatible" content="IE=edge">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
-    <title>Document</title>
+    <title>Index page </title>
</head>
<body>
```

## Unstaging files

```
dell@dell-Latitude-7490:~/work/gitFinal$ git s
A style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git restore --staged style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git s
?? style.css
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Discarding local changes



```
<> index.html # style.css A X
# style.css
1
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
dell@dell-Latitude-7490:~/work/gitFinal$ git restore style.css
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Restoring an earlier version of a file

```
dell@dell-Latitude-7490:~/work/gitFinal$ #Restoring old index.html
dell@dell-Latitude-7490:~/work/gitFinal$ git restore --source=HEAD~2 index.html
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Viewing the history

```
Date: Thu Sep 15 21:09:07 2022 +0530
dell@dell-Latitude-7490:~/work/gitFinal$ git log --stat
commit 8f1bbc319c5151ec4b3416390fd1479b286913a0 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:20:15 2022 +0530

    Styles added to html

index.html | 4 +++-
1 file changed, 3 insertions(+), 1 deletion(-)

commit 4bf2140d6f94ec0e843762784e55314a9fdad956
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:18:19 2022 +0530

    Index feature implemented

style.css | 0
1 file changed, 0 insertions(+), 0 deletions(-)

commit f2db8fd63d21cfa06c44b0a66c47565a93c2834a
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:13:48 2022 +0530

    html without adding is committed

index.html | 2 +-
:...skipping...
commit 8f1bbc319c5151ec4b3416390fd1479b286913a0 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:20:15 2022 +0530

    Styles added to html
```



## Show actual changes

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --patch
commit 8f1bbc319c5151ec4b3416390fd1479b286913a0 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:20:15 2022 +0530

    Styles added to html

diff --git a/index.html b/index.html
index 08c6446..980ed2e 100644
--- a/index.html
+++ b/index.html
@@ -7,6 +7,8 @@
     <title>Index page </title>
   </head>
   <body>
-
+   <div>
+     Index page
+   </div>
   </body>
 </html>
\ No newline at end of file
```

## Filtering the history

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log -2
commit 8f1bbc319c5151ec4b3416390fd1479b286913a0 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:20:15 2022 +0530

    Styles added to html

commit 4bf2140d6f94ec0e843762784e55314a9fdad956
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:18:19 2022 +0530

    Index feature implemented
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --author="pavan"
commit 8f1bbc319c5151ec4b3416390fd1479b286913a0 (HEAD -> master)
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:20:15 2022 +0530

    Styles added to html

commit 4bf2140d6f94ec0e843762784e55314a9fdad956
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:18:19 2022 +0530

    Index feature implemented
```

## Formatting the log output

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --pretty=format:"%an %Cred COMMITTED %Creset %H"
Pavan Kapoor COMMITTED 8f1bbc319c5151ec4b3416390fd1479b286913a0
Pavan Kapoor COMMITTED 4bf2140d6f94ec0e843762784e55314a9fdad956
Pavan Kapoor COMMITTED f2db8fd63d21cfa06c44b0a66c47565a93c2834a
Pavan Kapoor COMMITTED eac0c704be125a810153e6bfc461eee52fef3c43
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Creating an alias

```
dell@dell-Latitude-7490:~/work/gitFinal$ git config --global alias.lg "log --oneline"
dell@dell-Latitude-7490:~/work/gitFinal$ git lg
8f1bbc3 (HEAD -> master) Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Viewing a commit

```
dell@dell-Latitude-7490:~/work/gitFinal$ git show HEAD~2
commit f2db8fd63d21cfa06c44b0a66c47565a93c2834a
Author: Pavan Kapoor <pavankapoor31@gmail.com>
Date: Thu Sep 15 21:13:48 2022 +0530

    html without adding is committed

diff --git a/index.html b/index.html
index 56efbdb..08c6446 100644
--- a/index.html
+++ b/index.html
@@ -4,7 +4,7 @@
     <meta charset="UTF-8">
     <meta http-equiv="X-UA-Compatible" content="IE=edge">
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
-    <title>Document</title>
+    <title>Index page </title>
 </head>
 <body>

dell@dell-Latitude-7490:~/work/gitFinal$
```

## Checking out commit

```
dell@dell-Latitude-7490:~/work/gitFinal$ git lg
8f1bbc3 (HEAD -> master) Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout 4bf2140
Note: switching to '4bf2140'.
```

You are in 'detached HEAD' state. You can look around, make experimental changes and commit them, and you can discard any commits you make in this state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may do so (now or later) by using `-c` with the switch command. Example:

```
git switch -c <new-branch-name>
```

Or undo this operation with:

```
git switch -
```

Turn off this advice by setting config variable `advice.detachedHead` to `false`

HEAD is now at 4bf2140 Index feature implemented

```
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout master
Previous HEAD position was 4bf2140 Index feature implemented
Switched to branch 'master'
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Finding a bad commit --- GIT BISECT

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
8f1bbc3 (HEAD -> master) Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git bisect start
dell@dell-Latitude-7490:~/work/gitFinal$ git bisect bad
dell@dell-Latitude-7490:~/work/gitFinal$ git bisect good f2db8fd
Bisecting: 0 revisions left to test after this (roughly 0 steps)
[4bf2140d6f94ec0e843762784e55314a9fdad956] Index feature implemented
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
4bf2140 (HEAD) Index feature implemented
f2db8fd (refs/bisect/good-f2db8fd63d21cfa06c44b0a66c47565a93c2834a) html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git bisect reset
Previous HEAD position was 4bf2140 Index feature implemented
Switched to branch 'master'
dell@dell-Latitude-7490:~/work/gitFinal$
```



## Finding contributors

```
dell@dell-Latitude-7490:~/work/gitFinal$ git shortlog
Pavan Kapoor (4):
    HTML and CSS files for website
    html without adding is committed
    Index feature implemented
    Styles added to html

Someone (1):
    someone committed this

dell@dell-Latitude-7490:~/work/gitFinal$
```

## Finding the author of lines

```
dell@dell-Latitude-7490:~/work/gitFinal$ git blame index.html
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 1) <!DOCTYPE html>
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 2) <html lang="en">
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 3) <head>
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 4)     <meta charset="UTF-8">
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 5)     <meta http-equiv="X-UA-Compatible"
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 6)     <meta name="viewport" content="wid
ale=1.0">
f2db8fd6 (Pavan Kapoor 2022-09-15 21:13:48 +0530 7)     <title>Index page </title>
f4c2cf22 (Someone 2022-09-15 23:37:30 +0530 8)
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 9) </head>
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 10) <body>
8f1bbc31 (Pavan Kapoor 2022-09-15 21:20:15 +0530 11)     <div>
8f1bbc31 (Pavan Kapoor 2022-09-15 21:20:15 +0530 12)         Index page
8f1bbc31 (Pavan Kapoor 2022-09-15 21:20:15 +0530 13)     </div>
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 14) </body>
^eac0c70 (Pavan Kapoor 2022-09-15 21:09:07 +0530 15) </html>
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Tagging

```
dell@dell-Latitude-7490:~/work/gitFinal$ git tag v1.0
dell@dell-Latitude-7490:~/work/gitFinal$ git tag
v1.0
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
f4c2cf2 (HEAD -> master, tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```

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## Managing branches and merging branches

```
create mode 100644 style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git branch bugfix
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout bugfix
Switched to branch 'bugfix'
dell@dell-Latitude-7490:~/work/gitFinal$ code style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git add .
dell@dell-Latitude-7490:~/work/gitFinal$ git commit -m "Black background added "
[bugfix 73f762c] Black background added
 1 file changed, 3 insertions(+)
 create mode 100644 style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout master
Switched to branch 'master'
dell@dell-Latitude-7490:~/work/gitFinal$ git merge bugfix
Updating f4c2cf2..73f762c
Fast-forward
 style.css | 3 +++
 1 file changed, 3 insertions(+)
 create mode 100644 style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git branch -d bugfix
Deleted branch bugfix (was 73f762c).
dell@dell-Latitude-7490:~/work/gitFinal$
```

```
dell@dell-Latitude-7490:~/work/gitFinal$ git branch --merged
bugs
* master
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Rebasing

```
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout bugs
Switched to branch 'bugs'
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout master
Switched to branch 'master'
dell@dell-Latitude-7490:~/work/gitFinal$ git add .
dell@dell-Latitude-7490:~/work/gitFinal$ git commit -m "margins reset"
[master a3d3ef0] margins reset
 1 file changed, 4 insertions(+)
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout bugs
Switched to branch 'bugs'
dell@dell-Latitude-7490:~/work/gitFinal$ #Bugs is 1 commit behind master
dell@dell-Latitude-7490:~/work/gitFinal$ git rebase master
First, rewinding head to replay your work on top of it...
Fast-forwarded bugs to master.
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Cherry Picking

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
951b746 (HEAD -> master) Colored divs wheat
7cf6386 Colored p tags white
a3d3ef0 (bugs) margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git checkout bugs
Switched to branch 'bugs'
dell@dell-Latitude-7490:~/work/gitFinal$ git cherry-pick 7cf6386
[bugs 5df69db] Colored p tags white
Date: Thu Sep 15 23:47:10 2022 +0530
1 file changed, 5 insertions(+)
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
5df69db (HEAD -> bugs) Colored p tags white
a3d3ef0 margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```

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## GITHUB

### Cloning a Repository

```
dell@dell-Latitude-7490:~/work$ git clone https://github.com/pavankapoor31/gitPractice.git
Cloning into 'gitPractice'...
warning: You appear to have cloned an empty repository.
dell@dell-Latitude-7490:~/work$
```

### Syncing with remotes

```
dell@dell-Latitude-7490:~/work/gitPractice$ git remote -v
origin https://github.com/pavankapoor31/gitPractice.git (fetch)
origin https://github.com/pavankapoor31/gitPractice.git (push)
dell@dell-Latitude-7490:~/work/gitPractice$ git fetch origin
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 2.61 KiB | 2.61 MiB/s, done.
From https://github.com/pavankapoor31/gitPractice
* [new branch]      main      -> origin/main
dell@dell-Latitude-7490:~/work/gitPractice$ git pull
Your configuration specifies to merge with the ref 'refs/heads/master'
from the remote, but no such ref was fetched.
```

```

dell@dell-Latitude-7490:~/work/gitPractice$ git s
A   GitCommands.odt
??  ~/.lock.GitCommands.odt#
dell@dell-Latitude-7490:~/work/gitPractice$ echo ".~lock.GitCommands.odt#"> .gitignore
dell@dell-Latitude-7490:~/work/gitPractice$ cat .gitignore
~lock.GitCommands.odt#
dell@dell-Latitude-7490:~/work/gitPractice$ git s
A   GitCommands.odt
??  .gitignore
dell@dell-Latitude-7490:~/work/gitPractice$ git add .
dell@dell-Latitude-7490:~/work/gitPractice$ git commit -m"snapshots of all git commands performed so far in"
[master (root-commit) b9d84ed] snapshots of all git commands performed so far in
 2 files changed, 1 insertion(+)
 create mode 100644 .gitignore
 create mode 100644 GitCommands.odt
dell@dell-Latitude-7490:~/work/gitPractice$ git push origin
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 2.67 MiB | 4.58 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/pavankapoor31/gitPractice/pull/new/master
remote:
To https://github.com/pavankapoor31/gitPractice.git
 * [new branch]      master -> master
dell@dell-Latitude-7490:~/work/gitPractice$ 

```

## Sharing tags to remote

```

dell@dell-Latitude-7490:~/work/gitPractice$ git tag v1.0
dell@dell-Latitude-7490:~/work/gitPractice$ git log --oneline
b9d84ed (HEAD -> master, tag: v1.0, origin/master) snapshots of all git commands performed so far in
dell@dell-Latitude-7490:~/work/gitPractice$ git push origin v1.0
Total 0 (delta 0), reused 0 (delta 0)
To https://github.com/pavankapoor31/gitPractice.git
 * [new tag]         v1.0 -> v1.0
dell@dell-Latitude-7490:~/work/gitPractice$ 

```

```

git: 'credentials.helper' is not a git command. See 'git --help'.
dell@dell-Latitude-7490:~/work/gitPractice$ git config --local credentials.helper cache
dell@dell-Latitude-7490:~/work/gitPractice$ git push origin --delete v1.0
To https://github.com/pavankapoor31/gitPractice.git
 - [deleted]         v1.0
dell@dell-Latitude-7490:~/work/gitPractice$ 

```

## Sharing branches

```

dell@dell-Latitude-7490:~/work/gitPractice$ git branch -v
  addPdf b9d84ed snapshots of all git commands performed so far in
 * master b9d84ed snapshots of all git commands performed so far in
dell@dell-Latitude-7490:~/work/gitPractice$ git branch -r
  origin/main
  origin/master
dell@dell-Latitude-7490:~/work/gitPractice$ git push -u origin addPdf
Total 0 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'addPdf' on GitHub by visiting:
remote:   https://github.com/pavankapoor31/gitPractice/pull/new/addPdf
remote:
To https://github.com/pavankapoor31/gitPractice.git
 * [new branch]      addPdf -> addPdf
Branch 'addPdf' set up to track remote branch 'addPdf' from 'origin'.
dell@dell-Latitude-7490:~/work/gitPractice$ 

```



## Managing remote

```
dell@dell-Latitude-7490:~/work/gitPractice$ git remote
origin
dell@dell-Latitude-7490:~/work/gitPractice$ git remote add upstream https://github.com/pavanka
dell@dell-Latitude-7490:~/work/gitPractice$ git remote
origin
upstream
dell@dell-Latitude-7490:~/work/gitPractice$ git remote -v
origin https://github.com/pavankapoor31/gitPractice.git (fetch)
origin https://github.com/pavankapoor31/gitPractice.git (push)
upstream https://github.com/pavankapoor31/gitPractice (fetch)
upstream https://github.com/pavankapoor31/gitPractice (push)
dell@dell-Latitude-7490:~/work/gitPractice$ git remote rm upstream
dell@dell-Latitude-7490:~/work/gitPractice$ git remote
origin
dell@dell-Latitude-7490:~/work/gitPractice$
```

## Undoing commits

```
--ignore-skip-worktree-bits
dell@dell-Latitude-7490:~/work/gitFinal$ #Undoing commits
dell@dell-Latitude-7490:~/work/gitFinal$ #Removes the last commit, keeps changed staged
dell@dell-Latitude-7490:~/work/gitFinal$ git reset --soft HEAD~1
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
7cf6386 (HEAD -> master) Colored p tags white
a3d3ef0 margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ # Unstages the changes
dell@dell-Latitude-7490:~/work/gitFinal$ git reset --mixed HEAD~1
Unstaged changes after reset:
M    style.css
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
a3d3ef0 (HEAD -> master) margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```



## Reverting commits

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
fa42533 (HEAD -> master) Styles modified
a3d3ef0 margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git revert fa42533
[master b693b16] Revert "Styles modified"
 1 file changed, 9 deletions(-)
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
b693b16 (HEAD -> master) Revert "Styles modified"
fa42533 Styles modified
a3d3ef0 margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$
```

## Recovering lost commits

```
dell@dell-Latitude-7490:~/work/gitFinal$ git relog
b693b16 (HEAD -> master) HEAD@{0}: revert: Revert "Styles modified"
fa42533 HEAD@{1}: commit: Styles modified
a3d3ef0 HEAD@{2}: reset: moving to HEAD~1
7cf6386 HEAD@{3}: reset: moving to HEAD~1
951b746 HEAD@{4}: checkout: moving from bugs to master
5df69db (bugs) HEAD@{5}: cherry-pick: Colored p tags white
a3d3ef0 HEAD@{6}: checkout: moving from master to bugs
951b746 HEAD@{7}: commit: Colored divs wheat
7cf6386 HEAD@{8}: commit: Colored p tags white
a3d3ef0 HEAD@{9}: checkout: moving from bugs to master
a3d3ef0 HEAD@{10}: rebase finished: refs/heads/bugs onto a3d3ef0a3eb836f7ddfaced1e07d20652befab44
a3d3ef0 HEAD@{11}: rebase: checkout master
73f762c HEAD@{12}: checkout: moving from master to bugs
a3d3ef0 HEAD@{13}: commit: margins reset
73f762c HEAD@{14}: checkout: moving from bugs to master
73f762c HEAD@{15}: checkout: moving from master to bugs
73f762c HEAD@{16}: merge bugfix: Fast-forward
f4c2cf2 (tag: v1.0) HEAD@{17}: checkout: moving from bugfix to master
73f762c HEAD@{18}: commit: Black background added
f4c2cf2 (tag: v1.0) HEAD@{19}: checkout: moving from master to bugfix
f4c2cf2 (tag: v1.0) HEAD@{20}: commit: someone committed this
8f1bbc3 HEAD@{21}: checkout: moving from 4bf2140d6f94ec0e843762784e55314a9fdad956 to master
4bf2140 HEAD@{22}: checkout: moving from master to 4bf2140d6f94ec0e843762784e55314a9fdad956
8f1bbc3 HEAD@{23}: checkout: moving from 4bf2140d6f94ec0e843762784e55314a9fdad956 to master
4bf2140 HEAD@{24}: checkout: moving from master to 4bf2140
8f1bbc3 HEAD@{25}: reset: moving to HEAD
8f1bbc3 HEAD@{26}: reset: moving to HEAD
8f1bbc3 HEAD@{27}: commit: Styles added to html
4bf2140 HEAD@{28}: commit: Index feature implemented
f2db8fd HEAD@{29}: commit: html without adding is committed
eac0c70 HEAD@{30}: commit (amend): HTML and CSS files for website
...skipping...
b693b16 (HEAD -> master) HEAD@{0}: revert: Revert "Styles modified"
fa42533 HEAD@{1}: commit: Styles modified
```

```
dell@dell-Latitude-7490:~/work/gitFinal$ git relog show bugs
5df69db (bugs) bugs@{0}: cherry-pick: Colored p tags white
a3d3ef0 bugs@{1}: rebase finished: refs/heads/bugs onto a3d3ef0a3eb836f7ddfaced1e07d20652befab449
73f762c bugs@{2}: branch: Created from master
dell@dell-Latitude-7490:~/work/gitFinal$ █
```

## Amending the last commit

```
dell@dell-Latitude-7490:~/work/gitFinal$ git log --oneline
b693b16 (HEAD -> master) Revert "Styles modified"
fa42533 Styles modified
a3d3ef0 margins reset
73f762c Black background added
f4c2cf2 (tag: v1.0) someone committed this
8f1bbc3 Styles added to html
4bf2140 Index feature implemented
f2db8fd html without adding is committed
eac0c70 HTML and CSS files for website
dell@dell-Latitude-7490:~/work/gitFinal$ git commit --amend -m "Fixing styles.css"
[master b5ff98d] Fixing styles.css
Date: Fri Sep 16 10:52:14 2022 +0530
1 file changed, 9 deletions(-)
dell@dell-Latitude-7490:~/work/gitFinal$ █
```