

Practical-1 Pull and Merge difference

Merge:-It joins two or more development history together. The git merge command facilitates you to take the data created by git branch and integrate them into a single branch.

git Merge <branch_name>

Pull:- used to fetch and download content from a remote repository and immediately update the local repository to match that content.

git pull origin master

The screenshot shows a Visual Studio Code interface. The terminal window at the bottom displays the following git commands:

```
dhrupal@sf-cpu-397:~/pracs/prac1$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhrupal/pracs/prac1/.git/
dhrupal@sf-cpu-397:~/pracs/prac1$ git add .
dhrupal@sf-cpu-397:~/pracs/prac1$ git commit -m "initial commit"
```

The code editor shows a file named 'pract1.txt' with the content "1 this is before initial commit".

Activities Visual Studio Code Feb 16 17:29

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pract1.txt

pract1.txt
1 this is before initial commit

Screenshot captured
You can paste the image from the clipboard.

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruval@sf-cpu-397:~/pracs/prac1\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruval/pracs/prac1/.git/
dhruval@sf-cpu-397:~/pracs/prac1\$ git add .
dhruval@sf-cpu-397:~/pracs/prac1\$ git commit -m "initial commit"
[master (root-commit) 69996ea] initial commit
1 file changed, 1 insertion(+)
create mode 100644 pract1.txt
dhruval@sf-cpu-397:~/pracs/prac1\$

Activities Visual Studio Code Feb 16 17:30

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pract1.txt

pract1.txt
1 this is before initial commit
2
3 before commit 2

Screenshot captured
You can paste the image from the clipboard.

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruval@sf-cpu-397:~/pracs/prac1\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruval/pracs/prac1/.git/
dhruval@sf-cpu-397:~/pracs/prac1\$ git add .
dhruval@sf-cpu-397:~/pracs/prac1\$ git commit -m "initial commit"
[master (root-commit) 69996ea] initial commit
1 file changed, 1 insertion(+)
create mode 100644 pract1.txt
dhruval@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit2"
[master 9741d5a] commit2
1 file changed, 3 insertions(+), 1 deletion(-)
dhruval@sf-cpu-397:~/pracs/prac1\$

Activities Visual Studio Code Feb 16 17:30

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pract1.txt

pract1.txt
1 this is before initial commit
2
3 before commit 2

Screenshot captured
You can paste the image from the clipboard.

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruval@sf-cpu-397:~/pracs/prac1\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruval/pracs/prac1/.git/
dhruval@sf-cpu-397:~/pracs/prac1\$ git add .
dhruval@sf-cpu-397:~/pracs/prac1\$ git commit -m "initial commit"
[master (root-commit) 69996ea] initial commit
1 file changed, 1 insertion(+)
create mode 100644 pract1.txt
dhruval@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit2"
[master 9741d5a] commit2
1 file changed, 3 insertions(+), 1 deletion(-)
dhruval@sf-cpu-397:~/pracs/prac1\$

Activities Visual Studio Code Feb 16 17:30

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pract1.txt

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac1\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint: 'git config --global init.defaultBranch <name>'.
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint: 'git branch -m <name>'.
initialized empty Git repository in /home/dhruvat/pracs/prac1/.git/
dhruvat@sf-cpu-397:~/pracs/prac1\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -m "initial commit"
[master (root-commit) 69996ea] initial commit
 1 file changed, 1 insertion(+)
create mode 100644 pract1.txt
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit2"
[master 9741d5a] commit2
 1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit3"
[master 52e5c03] commit3
 1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac1\$

Activities Visual Studio Code Feb 16 17:33

File Edit Selection View Go Run Terminal Help

pract1.txt - prac1 - Visual Studio Code

Ln 6, Col 1 Spaces: 4 UTF-8 LF Plain Text Go

EXPLORER ... pract1.txt

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature

Activities Visual Studio Code

File Edit Selection View Go Run Terminal Help

pract1.txt - prac1 - Visual Studio Code

Ln 6, Col 1 Spaces: 4 UTF-8 LF Plain Text Go

EXPLORER ... pract1.txt

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature

Activities Visual Studio Code Feb 16 17:35

File Edit Selection View Go Run Terminal Help

EXPLORER ... prac1.txt X
PRAC1 prac1.txt
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 commit in feature

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

● dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
○ dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout master

Ln 7, Col 18 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:35

File Edit Selection View Go Run Terminal Help

EXPLORER ... prac1.txt X
PRAC1 prac1.txt
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

● dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
● dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout master
Switched to branch 'master'
○ dhruvat@sf-cpu-397:~/pracs/prac1\$

Ln 6, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:36 pract1.txt - prac1 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 after branching and before commit 3
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
dhrupal@sf-cpu-397:~/pracs/prac1$ git checkout -b feature
Switched to a new branch 'feature'
dhrupal@sf-cpu-397:~/pracs/prac1$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1$ git checkout master
Switched to branch 'master'
dhrupal@sf-cpu-397:~/pracs/prac1$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1$ git merge feature
```

OUTLINE

TIMELINE

master 0 0 0

Ln 7, Col 37 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:36 Screenshot captured You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 <<<<< HEAD (Current Change)
8 after branching and before commit 3
9
10 commit in feature
11 >>>> feature (Incoming Change)
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
dhrupal@sf-cpu-397:~/pracs/prac1$ git checkout -b feature
Switched to a new branch 'feature'
dhrupal@sf-cpu-397:~/pracs/prac1$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1$ git checkout master
Switched to branch 'master'
dhrupal@sf-cpu-397:~/pracs/prac1$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1$ git merge feature
Auto-merging pract1.txt
CONFLICT (content): Merge conflict in pract1.txt
Automatic merge failed; fix conflicts and then commit the result.
dhrupal@sf-cpu-397:~/pracs/prac1$
```

OUTLINE

TIMELINE

master 0 0 0

Ln 12, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:37

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt X

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 after branching and before commit 3
8 commit in feature
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature
Switched to a new branch 'feature'
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout master
Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhruvat@sf-cpu-397:~/pracs/prac1\$ git merge feature
Auto-merging pract1.txt
CONFLICT (content): Merge conflict in pract1.txt
Automatic merge failed; fix conflicts and then commit the result.
dhruvat@sf-cpu-397:~/pracs/prac1\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac1\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "aftert merge commit"
[master 1857f61] aftert merge commit
dhruvat@sf-cpu-397:~/pracs/prac1\$

Ln 7, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:37

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt X

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 after branching and before commit 3
8 commit in feature
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature
Switched to a new branch 'feature'
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
dhruvat@sf-cpu-397:~/pracs/prac1\$ git checkout master
Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhruvat@sf-cpu-397:~/pracs/prac1\$ git merge feature
Auto-merging pract1.txt
CONFLICT (content): Merge conflict in pract1.txt
Automatic merge failed; fix conflicts and then commit the result.
dhruvat@sf-cpu-397:~/pracs/prac1\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac1\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "aftert merge commit"
[master 1857f61] aftert merge commit
dhruvat@sf-cpu-397:~/pracs/prac1\$ git log --oneline
1857f61 (HEAD => master) aftert merge commit
a973287 commit3
9f6453c (feature) commit in feature
52e5c03 commit3
9741d5a commit2
60996ea initial commit
dhruvat@sf-cpu-397:~/pracs/prac1\$

Ln 7, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 17:39

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt X

PRAC1 pract1.txt

```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 after branching and before commit 3
8 commit in feature
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhrupal@sf-cpu-397:~/pracs/prac1\$ git checkout -b feature
Switched to a new branch 'feature'
dhrupal@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit in feature"
[feature 9f6453c] commit in feature
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1\$ git checkout master
Switched to branch 'master'
dhrupal@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1\$ git merge feature
Auto-merging pract1.txt
CONFLICT (content): Merge conflict in pract1.txt
Automatic merge failed; fix conflicts and then commit the result.
dhrupal@sf-cpu-397:~/pracs/prac1\$ git add .
dhrupal@sf-cpu-397:~/pracs/prac1\$ git add .
dhrupal@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "aftert merge commit"
[master 1857f61] aftert merge commit
dhrupal@sf-cpu-397:~/pracs/prac1\$ git log --oneline
a973287 (HEAD -> master) aftert merge commit
9f6453c (feature) commit in feature
52e5c03 commit3
9741d5a commit2
60996ea initial commit
dhrupal@sf-cpu-397:~/pracs/prac1\$ git remote add origin https://github.com/Dhrupal-dotcom/gitprac.git

OUTLINE TIMELINE

master 0 0 0

Activities Visual Studio Code Feb 16 17:39

Screenshot captured You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... pract1.txt X

PRAC1 pract1.txt

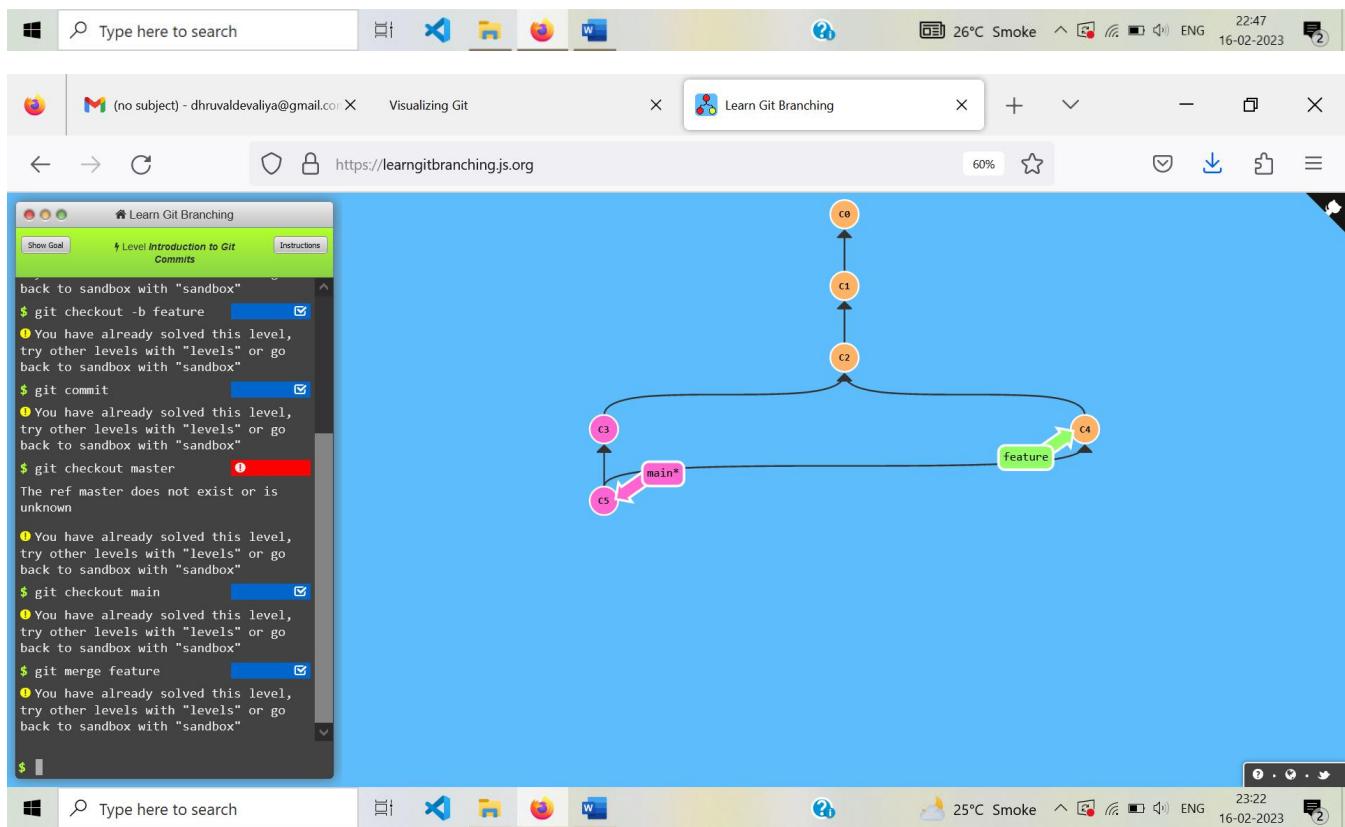
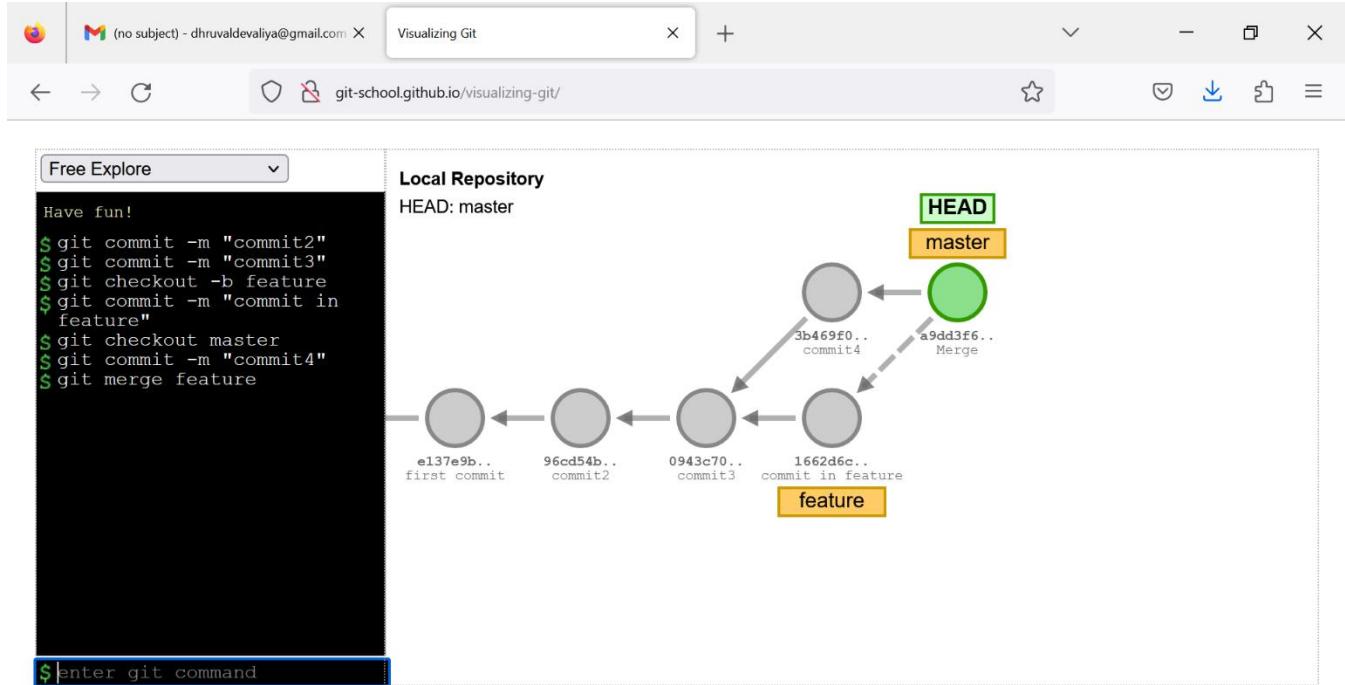
```
1 this is before initial commit
2
3 before commit 2
4
5 before commit 3
6
7 after branching and before commit 3
8 commit in feature
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhrupal@sf-cpu-397:~/pracs/prac1\$ git checkout master
Switched to branch 'master'
dhrupal@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "commit3"
[master a973287] commit3
1 file changed, 2 insertions(+)
dhrupal@sf-cpu-397:~/pracs/prac1\$ git merge feature
Auto-merging pract1.txt
CONFLICT (content): Merge conflict in pract1.txt
Automatic merge failed; fix conflicts and then commit the result.
dhrupal@sf-cpu-397:~/pracs/prac1\$ git add .
dhrupal@sf-cpu-397:~/pracs/prac1\$ git commit -a -m "aftert merge commit"
[master 1857f61] aftert merge commit
dhrupal@sf-cpu-397:~/pracs/prac1\$ git log --oneline
a973287 (HEAD -> master) aftert merge commit
9f6453c (feature) commit in feature
52e5c03 commit3
9741d5a commit2
60996ea initial commit
dhrupal@sf-cpu-397:~/pracs/prac1\$ git remote add origin https://github.com/Dhrupal-dotcom/gitprac.git
dhrupal@sf-cpu-397:~/pracs/prac1\$ git push -u origin master
Enumerating objects: 18, done.
Counting objects: 100% (18/18), done.
Delta compression using up to 8 threads.
Compressing objects: 100% (10/10), done.
Writing objects: 100% (18/18), 1.38 MiB/s, done.
Total 18 (delta 9), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), done.
To https://github.com/Dhrupal-dotcom/gitprac.git
 * [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
dhrupal@sf-cpu-397:~/pracs/prac1\$

OUTLINE TIMELINE

master 0 0 0



Main commands used

- git commit -upto 5 times
- git checkout c2
- git checkout -b feature
- git commit
- git checkout master
- git merge feature

Practical-2 Rebase

Rebase:-Rebasing is a process to reapply commits on top of another base trip. It is used to apply a sequence of commits from distinct branches into a final commit

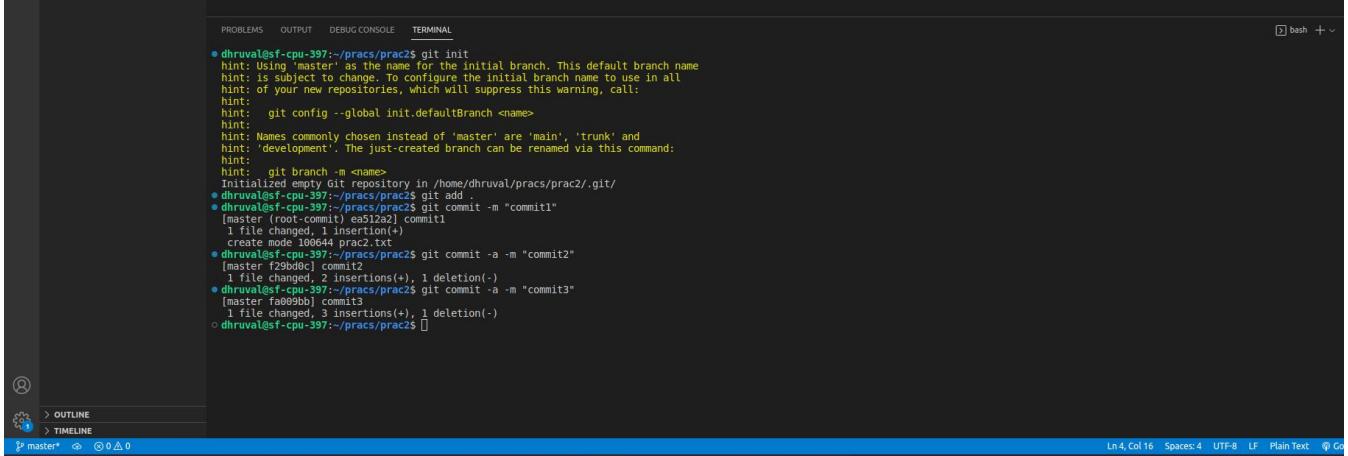
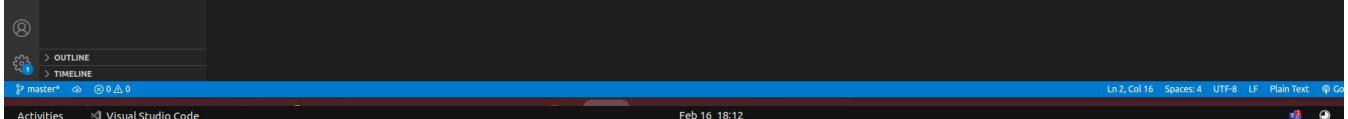
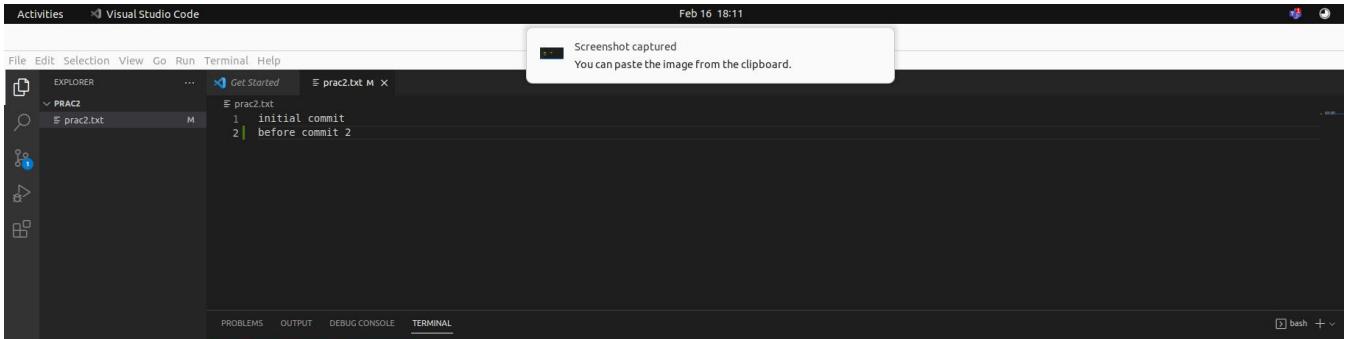
git rebase <branch_name>

The screenshot shows a Visual Studio Code interface. The terminal window at the bottom displays the following git history:

```
* dhruval@sf-cpu-397:~/pracs/prac2$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruval/pracs/prac2/.git/
* dhruval@sf-cpu-397:~/pracs/prac2$ git add .
* dhruval@sf-cpu-397:~/pracs/prac2$ git commit -m "commit"
[master (root-commit) ea51za2] commit
 1 file changed, 1 insertion(+)
  create mode 100644 prac2.txt
o dhruval@sf-cpu-397:~/pracs/prac2$
```

The Explorer view on the left shows a project named 'PRAC2' containing a file 'prac2.txt'. The file content is:

```
1 initial commit
2 before commit 2
```



Activities Visual Studio Code Feb 16 18:13

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt M

PRAC2 prac2.txt M

prac2.txt
1 initial commit
2 before commit 1

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac2\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac2/.git/
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -m "c1"
[master (root-commit) fc518cb] c1
1 file changed, 1 insertion(+)
create mode 100644 prac2.txt
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -m "c2"

Ln 2, Col 17 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:15

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt M

PRAC2 prac2.txt M

prac2.txt
1 initial commit
2 before commit 2
3
4 before c3

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

dhruvat@sf-cpu-397:~/pracs/prac2\$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac2/.git/
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -m "c1"
[master (root-commit) fc518cb] c1
1 file changed, 1 insertion(+)
create mode 100644 prac2.txt
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -m "c2"
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: prac2.txt
no changes added to commit (use "git add" and/or "git commit -a")
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -a -m "c2"
[master 42a5836] c2
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -a -m "c3"

Ln 4, Col 10 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:15

Screenshot captured
You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt M

prac2.txt

```
1 initial commit
2 before commit 2
3
4 before c3
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

bash +

```
dhruvat@sf-cpu-397:~/pracs/prac2$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
initialized empty Git repository in /home/dhruvat/pracs/prac2/.git/
dhruvat@sf-cpu-397:~/pracs/prac2$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2$ git commit -m "c1"
[master (root-commit) fc518cb] c1
 1 file changed, 1 insertion(+)
 create mode 100644 prac2.txt
dhruvat@sf-cpu-397:~/pracs/prac2$ git commit -m "c2"
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:  prac2.txt
no changes added to commit (use "git add" and/or "git commit -a")
dhruvat@sf-cpu-397:~/pracs/prac2$ git commit -a -m "c2"
[master 42a5836] c2
 1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac2$ git commit -a -m "c3"
[master b5b63f6] c3
 1 file changed, 1 insertion(+)
dhruvat@sf-cpu-397:~/pracs/prac2$
```

Ln 4, Col 10 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:17

prac2.txt - prac2 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt

prac2.txt

```
1 initial commit
2 before commit 2
3
4 commit in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

bash +

```
37545e0 (HEAD -> master) c4
b5b63f6 c3
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$ git checkout "42a5836".
Note: switching to '42a5836'.
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 42a5836 c2
dhruvat@sf-cpu-397:~/pracs/prac2$ git checkout -b feature
Switched to a new branch 'feature'
dhruvat@sf-cpu-397:~/pracs/prac2$ git commit -a -m "commit in feature"
[feature 3d2743a] commit in feature
 1 file changed, 1 insertion(+)
dhruvat@sf-cpu-397:~/pracs/prac2$ git log --oneline
3d2743a (HEAD -> feature) commit in feature
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$
```

Ln 4, Col 18 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:19

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt

PRAC2

prac2.txt

```

1 initial commit
2 before commit 2
3
4 before c3
5
6 before c4

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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 42a5836 c2

- dhraval@sf-cpu-397:~/pracs/prac2\$ git checkout -b feature
- Switched to a new branch 'feature'
- dhraval@sf-cpu-397:~/pracs/prac2\$ git commit -a -m "commit in feature"
- [feature 3d2743a] commit in feature
- ! 1 file changed, 1 insertion(+)
- dhraval@sf-cpu-397:~/pracs/prac2\$ git log --oneline
- 3d2743a (HEAD -> feature) commit in feature
- 42a5836 c2
- f518cb C1
- dhraval@sf-cpu-397:~/pracs/prac2\$ git checkout master
- Switched to branch 'master'
- dhraval@sf-cpu-397:~/pracs/prac2\$ git log --oneline
- 37545e0 (HEAD -> master) c4
- b5b63f6 C3
- 42a5836 c2
- f518cb C1
- dhraval@sf-cpu-397:~/pracs/prac2\$

Ln 6, Col 10 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:19

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt

PRAC2

prac2.txt

```

1 initial commit
2 before commit 2
3
4 before c3
5
6 before c4

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Or undo this operation with:

```
git switch -
```

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

HEAD is now at 42a5836 c2

- dhraval@sf-cpu-397:~/pracs/prac2\$ git checkout -b feature
- Switched to a new branch 'feature'
- dhraval@sf-cpu-397:~/pracs/prac2\$ git commit -a -m "commit in feature"
- [feature 3d2743a] commit in feature
- ! 1 file changed, 1 insertion(+)
- dhraval@sf-cpu-397:~/pracs/prac2\$ git log --oneline
- 3d2743a (HEAD -> feature) commit in feature
- 42a5836 c2
- f518cb C1
- dhraval@sf-cpu-397:~/pracs/prac2\$ git checkout master
- Switched to branch 'master'
- dhraval@sf-cpu-397:~/pracs/prac2\$ git log --oneline
- 37545e0 (HEAD -> master) c4
- b5b63f6 C3
- 42a5836 c2
- f518cb C1
- dhraval@sf-cpu-397:~/pracs/prac2\$ git rebase feature
- Auto-merging prac2.txt
- CONFLICT (content): Merge conflict in prac2.txt
- error: could not apply b5b63f6... c3
- hint: Rebase failed because there were conflicts.
- hint: mark them as resolved with
- hint: "git add/rm <conflicted files>".
- hint: You can instead skip this commit: run "git rebase --skip".
- hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
- Could not apply b5b63f6... c3
- dhraval@sf-cpu-397:~/pracs/prac2\$

Ln 9, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:20

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt M

prac2.txt

```
1 initial commit
2 before commit 2
3
4 before c3
5
6 before c4
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
3d2743a (HEAD -> feature) commit in feature
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$ git checkout master
Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac2$ git log --oneline
37545e0 (HEAD -> master) c4
b5b63f6 c3
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase feature
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply b5b63f6... c3
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply b5b63f6... c3
dhruvat@sf-cpu-397:~/pracs/prac2$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase --continue
[detached HEAD c0427a2] edited
1 file changed, 1 insertion(+), 1 deletion(-)
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply 37545e0... c4
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 37545e0... c4
dhruvat@sf-cpu-397:~/pracs/prac2$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase --continue
dhruvat@sf-cpu-397:~/pracs/prac2$
```

c0427a2+ (Rebasing) ① 0 △ 0

Ln 7, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:20

File Edit Selection View Go Run Terminal Help

prac2.txt - prac2 - Visual Studio Code

EXPLORER ... Get Started prac2.txt M

prac2.txt

```
1 initial commit
2 before commit 2
3
4 before c3
5
6 before c4
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
3d2743a (HEAD -> feature) commit in feature
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$ git checkout master
Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac2$ git log --oneline
37545e0 (HEAD -> master) c4
b5b63f6 c3
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase feature
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply b5b63f6... c3
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply b5b63f6... c3
dhruvat@sf-cpu-397:~/pracs/prac2$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase --continue
[detached HEAD c0427a2] edited
1 file changed, 1 insertion(+), 1 deletion(-)
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply 37545e0... c4
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 37545e0... c4
dhruvat@sf-cpu-397:~/pracs/prac2$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2$ git rebase --continue
```

c0427a2+ (Rebasing) ① 0 △ 0

Ln 7, Col 1 Spaces:4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:21

prac2.txt - prac2 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt M

PRAC2 prac2.txt M

1 initial commit
2 before commit 2
3
4 before c3
5
6 before c4
7

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

GNU nano 6.2 /home/dhruval/pracs/prac2/.git/COMMIT EDITMSG *

c4 edited

Please enter the commit message for your changes. Lines starting
with '#' will be ignored, and an empty message aborts the commit.

interactive rebase in progress; onto 3d2743a
Last commands done (2 commands done):
pick b5b63f6 c3
pick 37545e0 c4
No commands remaining.
You are currently rebasing branch 'master' on '3d2743a'.

Changes to be committed:
modified: prac2.txt
#

OUTLINE TIMELINE

Help Exit Write Out Read File Where Is Replace Cut Paste Justify Location Go To Line Undo Redo Set Mark To Bracket Where Was Previous Next Back Forward Prev Word Next Word

c0427a22+ (Rebasing) 0 0 △ 0 Ln 7, Col 1 Spaces: 4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:21

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt

PRAC2

prac2.txt

```
initial commit
before commit 2
before c3
before c4
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac2\$ git log --oneline
37545e0 (HEAD -> master) c4
b5b63f6 c3
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase feature
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply b5b63f6... c3
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicting files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply b5b63f6... c3
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase --continue
[detached HEAD e64fd5d] c3 edited
1 file changed, 1 insertion(+), 1 deletion(-)
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply 37545e0... c4
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicting files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 37545e0... c4
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase --continue
[detached HEAD e64fd5d] c3 edited
1 file changed, 2 insertions(+), 0 deletions(-)
Successfully rebased and updated refs/heads/master.
dhruvat@sf-cpu-397:~/pracs/prac2\$ git log --oneline

Ln 7, Col 1 Spaces: 4 UTF-8 LF Plain Text Go

Activities Visual Studio Code Feb 16 18:23

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac2.txt

PRAC2

prac2.txt

```
initial commit
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Switched to a new branch 'feature'
dhruvat@sf-cpu-397:~/pracs/prac2\$ git commit -a -m "commit in feature"
[feature 3d2743a] commit in feature
1 file changed, 1 insertion(+)
dhruvat@sf-cpu-397:~/pracs/prac2\$ git log --oneline
3d2743a (HEAD -> feature) commit in feature
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2\$ git checkout master
Switched to branch 'master'
dhruvat@sf-cpu-397:~/pracs/prac2\$ git log --oneline
37545e0 (HEAD -> master) c4
b5b63f6 c3
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase feature
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply b5b63f6... c3
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicting files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply b5b63f6... c3
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase --continue
[detached HEAD c4d2743] c3 edited
1 file changed, 1 insertion(+), 1 deletion(-)
Auto-merging prac2.txt
CONFLICT (content): Merge conflict in prac2.txt
error: could not apply 37545e0... c4
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicting files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 37545e0... c4
dhruvat@sf-cpu-397:~/pracs/prac2\$ git add .
dhruvat@sf-cpu-397:~/pracs/prac2\$ git rebase --continue
[detached HEAD e64fd5d] c4 edited
1 file changed, 2 insertions(+)
Successfully rebased and updated refs/heads/master.
dhruvat@sf-cpu-397:~/pracs/prac2\$ git log --oneline
c4d2743 (feature) commit in feature
42a5836 c2
fc518cb c1
dhruvat@sf-cpu-397:~/pracs/prac2\$

Ln 7, Col 1 Spaces: 4 UTF-8 LF Plain Text Go

Free Explore

```
Have fun!
$ git commit -m "commit2"
$ git commit -m "commit3"
$ git commit -m "commit4"
$ git checkout "413539e"
$ git checkout -b feature
$ git commit -m "commit in feature"
$ git checkout master
```

Local Repository
HEAD: master

The diagram shows a sequence of four commits on the 'master' branch: 'first commit' (grey circle), 'commit2' (grey circle), 'commit3' (grey circle), and 'commit4' (green circle). A separate 'feature' branch (orange box) points to 'commit3'. Labels below each commit indicate their hash and message. A green box labeled 'HEAD' is positioned next to 'commit4'.

Type here to search

```
Visualizing Git
```

25°C Smoke 23:02 16-02-2023

Free Explore

```
Have fun!
$ git commit -m "commit2"
$ git commit -m "commit3"
$ git commit -m "commit4"
$ git checkout "413539e"
$ git checkout -b feature
$ git commit -m "commit in feature"
$ git checkout master
$ git rebase feature
```

Local Repository
HEAD: master

The diagram shows the state after running 'git rebase feature'. The 'feature' branch now points to 'commit4' (purple circle). The 'master' branch (orange box) points to 'commit3' (grey circle). Commits 'first commit' and 'commit2' are still present but have dashed arrows indicating they are no longer part of the main line of development. A green box labeled 'HEAD' is positioned next to 'commit3'.

Type here to search

```
Visualizing Git
```

25°C Smoke 23:02 16-02-2023

Free Explore

```
Have fun!
$ git commit -m "commit2"
$ git commit -m "commit3"
$ git commit -m "commit4"
$ git checkout "413539e"
$ git checkout -b feature
$ git commit -m "commit in feature"
$ git checkout master
$ git rebase feature
```

Local Repository
HEAD: master

The diagram shows the final state after the rebase. The 'feature' branch now points to 'commit4' (purple circle). The 'master' branch (orange box) points to 'commit3' (grey circle). Commits 'first commit' and 'commit2' are no longer visible. A green box labeled 'HEAD' is positioned next to 'commit3'.

Main commands used

-git commit upto 4 times

-git checkout c2

-git checkout -b feature

-git commit

-git checkout master

-git rebase feature

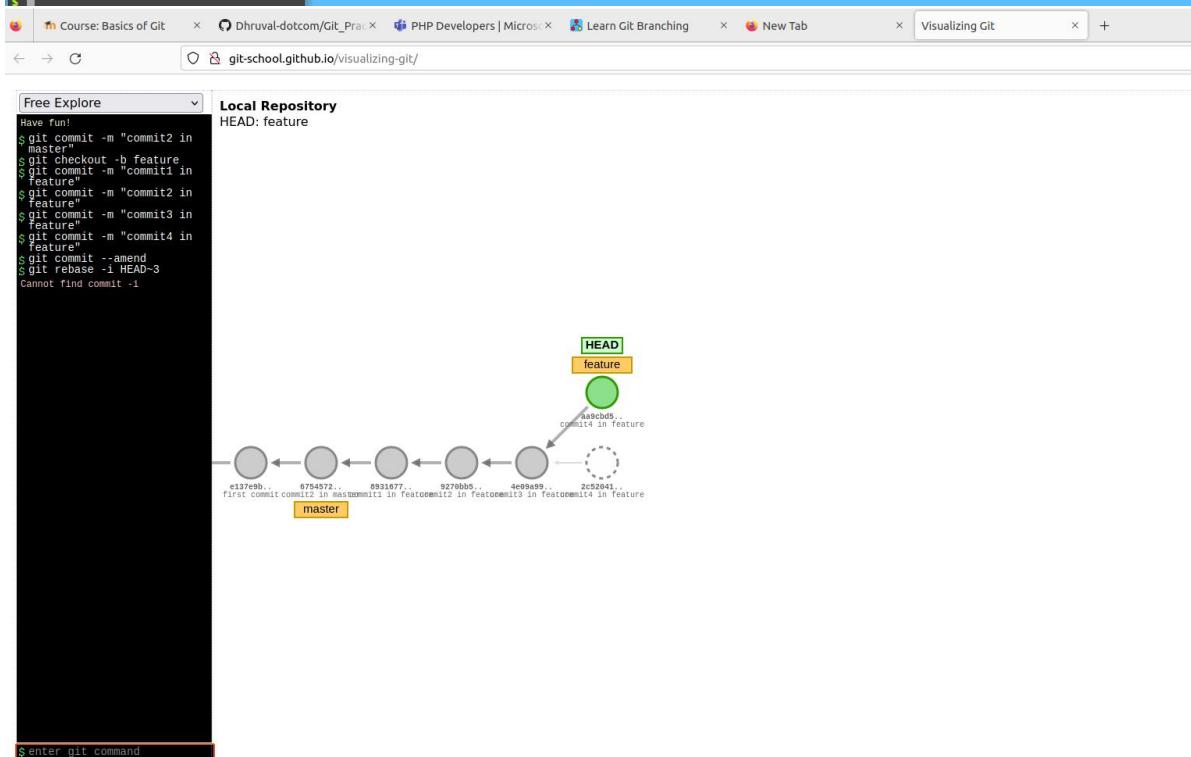
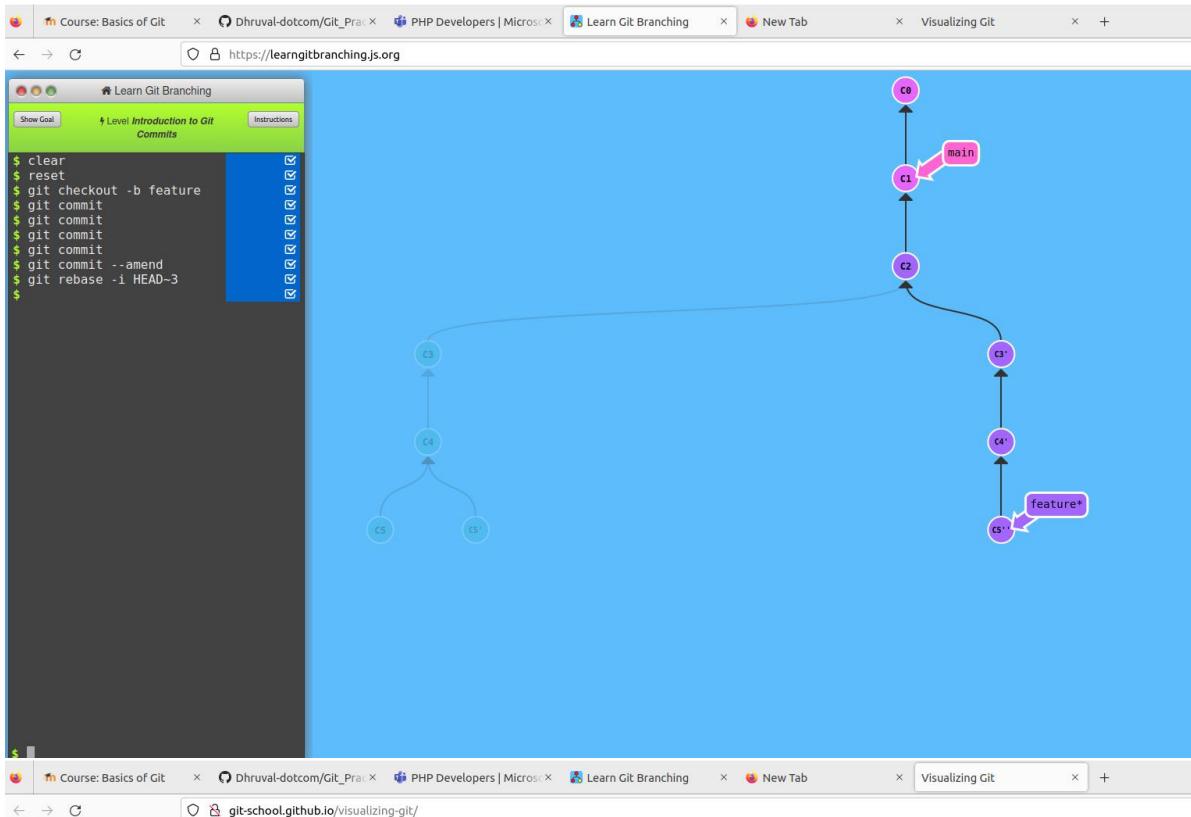
Practical-3 Change commit message

- ✓ **Amend** :- git commit --amend is used to change the last comit message

```
git commit --amend
```

- ✓ **Interactive Rebase**:- interactive rebase helps comiting the last selected commit's message

```
git cherry-pick -i HEAD~4
```



File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started E prac3.txt x

PRAC3

prac3.txt

```
1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
● dhruvat@sf-cpu-397:~/pracs/prac3$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac3/.git/
● dhruvat@sf-cpu-397:~/pracs/prac3$ git add .
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -m "commit1 in master"
[master (root-commit) 75eaf7a] commit1 in master
1 file changed, 1 insertion(+)
create mode 100644 prac3.txt
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit2 in master"
[master 998c72d] commit2 in master
1 file changed, 1 insertion(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac3$ git checkout -b feature
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit1 in feature"
[feature 44eee03] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit2 in feature"
[feature 913e47f] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit3 in feature"
[feature f73de6c] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit4 in feature"
[feature ad95f52] commit4 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
○ dhruvat@sf-cpu-397:~/pracs/prac3$
```

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started E prac3.txt x

PRAC3

prac3.txt

```
1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
GNU nano 6.2
commit4 in feature edited
/home/dhruvat/pracs/prac3/.git/COMMIT EDITMSG *
```

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:      Fri Feb 17 10:43:08 2023 +0530
#
# On branch feature
# Changes to be committed:
#   modified:   prac3.txt
#
```

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark To Bracket Copy Where Was Previous Next

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac3.txt

prac3.txt

```

1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```

dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit2 in master"
[master 299c72d] commit2 in master
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3$ git checkout -b feature
Switched to a new branch 'feature'
dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit1 in feature"
[feature 44ee0e3] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit2 in feature"
[feature 913e47f] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit3 in feature"
[feature f73de6c] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3$ git commit -a -m "commit4 in feature"
[feature ad95f52] commit4 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3$ git log --oneline
ad95f52 (HEAD -> feature) commit4 in feature
f73de6c commit3 in feature
913e47f commit2 in feature
44ee0e3 commit1 in feature
998c72d (master) commit2 in master
75ea7f7 commit1 in master
● dhruvat@sf-cpu-397:~/pracs/prac3$ git commit --amend
[feature 4535d3e] commit1 in feature edited
Date: Fri Feb 17 10:43:08 2023 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac3$ git log --oneline
4535d3e (HEAD -> feature) commit4 in feature edited
f73de6c commit3 in feature
913e47f commit2 in feature
44ee0e3 commit1 in feature
998c72d (master) commit2 in master
75ea7f7 commit1 in master
○ dhruvat@sf-cpu-397:~/pracs/prac3$ git rebase -i HEAD~3

```

prac3.txt - prac3 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac3.txt

prac3.txt

```

1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```

GNU nano 6.2
r 913e47f commit2 in feature
r f73de6c commit3 in feature
r 4535d3e commit4 in feature edited

# Rebase 44ee0e3..4535d3e onto 44ee0e3 (3 commands)
#
# Commands:
# p, pick <commit> = use commit
# e, edit <commit> = use commit, but edit the commit message
# e, edit <commit> = use commit, but stop for amending
# s, squash <commit> = use commit, but meld into previous commit
# f, fixup [-C | -c] <commit> = like "squash" but keep only the previous
# commit's log message, unless -C is used, in which case
# keep only this commit's message; -c is same as -C but
# opens the editor
# x, exec <command> = run command (the rest of the line) using shell
# b, break = stop here (continue rebase later with "git rebase --continue")
# d, drop <commit> = delete commit
# l, label <label> = label current HEAD with a name
# t, reset <label> = reset HEAD to a label
# m, merge [-C <commit>] [-c <commit>] <label> [# <newline>]
# ., create a merge commit using the original merge commit's
# ., message (or the oneline, if no original merge commit was
# ., specified); use -c <commit> to reword the commit message
#
# These lines can be re-ordered; they are executed from top to bottom.
#
# If you remove a line here THAT COMMIT WILL BE LOST.
#
# However, if you remove everything, the rebase will be aborted.
#

```

Help Write Out Where Is Cut Execute Justify Location Go To Line Undo Redo Set Mark To Bracket Copy Where Was Previous Next

Exit Read File Replace

prac3.txt - prac3 - Visual Studio Code

prac3.txt - prac3 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac3.txt

PRAC3 prac3.txt

```

1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

GNU nano 6.2 /home/dhruvat/pracs/prac3/.git/COMMIT EDITMSG *

commit4^ in feature edited again.

Please enter the commit message for your changes. Lines starting
with '#' will be ignored, and an empty message aborts the commit.

Date: Fri Feb 17 10:43:08 2023 +0530

interactive rebase in progress; onto 44ee0e3
Last commands done (3 commands done):
1: 1 file changed, 3 insertions(+), 1 deletion(-)
2: 1 file changed, 3 insertions(+), 1 deletion(-)
3: 1 file changed, 3 insertions(+), 1 deletion(-)
Reward 453d3e commit4 in feature edited
No Commands remaining.
You are currently editing a commit while rebasing branch 'feature' on '44ee0e3'.

Changes to be committed:
modified: prac3.txt
#

OUTLINE TIMELINE

Help Exit Write Out Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark Copy Where Was Previous Next

prac3.txt - prac3 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac3.txt

PRAC3 prac3.txt

```

1 before initial commit
2
3 before commit 2 in master
4
5 before commit 1 in feature
6
7 before commit 2 in feature
8
9 before commit 3 in feature
10
11 before commit 4 in feature

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

ad95f52 (HEAD -> feature) commit4 in feature
f73de6c commit3 in feature
913e47f commit2 in feature
44ee0e3 commit1 in feature
998c72d (master) commit2 in master
75ea7f7a commit1 in master
dhruvat@sf-cpu-397:~/pracs/prac3\$ git commit --amend
[feature 453d3e] commit4 in feature edited
Date: Fri Feb 17 10:43:08 2023 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvat@sf-cpu-397:~/pracs/prac3\$ git log --oneline
453d3e (HEAD -> feature) commit4 in feature edited
f73de6c commit3 in feature
913e47f commit2 in feature
44ee0e3 commit1 in feature
998c72d (master) commit2 in master
75ea7f7a commit1 in master
● dhruvat@sf-cpu-397:~/pracs/prac3\$ git rebase -i HEAD~3
[detached HEAD f7b813a] commit2 in feature edited
Date: Fri Feb 17 10:42:33 2023 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
[detached HEAD acfa3cb] commit4 in feature edited again
Date: Fri Feb 17 10:42:47 2023 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
[detached HEAD acfa3cb] commit4 in feature edited again
Date: Fri Feb 17 10:43:08 2023 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
Successfully rebased and updated refs/heads/feature.
● dhruvat@sf-cpu-397:~/pracs/prac3\$ git log --oneline
acfa3cb (HEAD -> feature) commit4 in feature edited again
73b8e1b commit3 in feature edited
f7b813a commit2 in feature edited
44ee0e3 commit1 in feature
998c72d (master) commit2 in master
75ea7f7a commit1 in master
○ dhruvat@sf-cpu-397:~/pracs/prac3\$

OUTLINE TIMELINE

Main commands used

```
-git commit 2 times in master  
-git checkout -b feature  
-git commit 4 times in feature  
-git commit --amend  
-git rebase -i HEAD~3  
- put reword in place of pick edit comment
```

Practical-4 Cherry-pick

cherry-pick :-git cherry-pick is a powerful command that enables arbitrary Git commits to be picked by reference and appended to the current working HEAD

```
git cherry-pick c1 c3 c5
```

Course: Basics of Git Dhruv DOTCOM/Git_Pra... PHP Developers | Microsoft Visualizing Git

Free Explore Local Repository HEAD: master

```
$ git commit -m "c2 in master"
$ git checkout -b feature
$ git commit -m "c1 in feature"
$ git commit -m "c2 in feature"
I don't understand that.
$ git commit -m "c1 in feature"
$ git commit -m "c2 in feature"
$ git commit -m "c3 in feature"
$ git checkout master
$ git cherry-pick "48b078e"
'e9b2aa9'
```

\$ enter git command

prac4.txt - prac4 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt

prac4.txt
1 this is prac4 before commit 1
2
3 before commit 2 in master

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
● dhruv@sf-cpu-397:~/pracs/prac4$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruv/pracs/prac4/.git/
● dhruv@sf-cpu-397:~/pracs/prac4$ git add .
● dhruv@sf-cpu-397:~/pracs/prac4$ git commit -m "commit1 in master"
[master 710ce89] commit1 in master
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruv@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit2 in master"
[master 710ce89] commit2 in master
1 file changed, 3 insertions(+), 1 deletion(-)
○ dhruv@sf-cpu-397:~/pracs/prac4$
```

OUTLINE TIMELINE

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt

prac4.txt
1 this is prac4 before commit 1
2
3 before commit 2 in master
4
5 before c1 in feature
6
7 before c2 in feature
8
9 before c3 in feature

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
● dhruvat@sf-cpu-397:~/pracs/prac4$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac4/.git/
● dhruvat@sf-cpu-397:~/pracs/prac4$ git add .
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -m "commit1 in master"
[master (root-commit) fdc8e72] commit1 in master
1 file changed, 1 insertion(+)
tree: 100644 prac4.txt
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit2 in master"
[master 710ce89] commit2 in master
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git checkout -b "feature"
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit1 in feature"
[feature 433223] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit2 in feature"
[feature 71e763f] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit3 in feature"
[feature 3ce2cbc] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
○ dhruvat@sf-cpu-397:~/pracs/prac4$
```

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt

prac4.txt
1 this is prac4 before commit 1
2
3 before commit 2 in master

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac4/.git/
● dhruvat@sf-cpu-397:~/pracs/prac4$ git add .
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -m "commit1 in master"
[master (root-commit) fdc8e72] commit1 in master
1 file changed, 1 insertion(+)
tree: 100644 prac4.txt
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit2 in master"
[master 710ce89] commit2 in master
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git checkout -b "feature"
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit1 in feature"
[feature 433223] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit2 in feature"
[feature 71e763f] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git commit -a -m "commit3 in feature"
[feature 3ce2cbc] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac4$ git log --oneline
3ce2cbc (HEAD - feature) commit3 in feature
71e763f commit2 in feature
433223 commit1 in feature
710ce89 (master) commit2 in master
fdc8e72 commit1 in master
● dhruvat@sf-cpu-397:~/pracs/prac4$ git checkout master
Switched to branch 'master'
○ dhruvat@sf-cpu-397:~/pracs/prac4$
```

prac4.txt - prac4 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt

prac4.txt

```
1 this is prac4 before commit 1
2
3 <===== HEAD (Current Change)
4 before commit 2 in master
5 =====
6 before commit 2 in master
7
8 before c1 in feature
9
10 before c2 in feature
11 >>>> 71e763f (commit2 in feature) (Incoming Change)
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

- dhruvat@sf-cpu-397:~/pracs/prac4\$ git commit -a -m "commit2 in master"
[master 710ce89] commit2 in master
1 file changed, 3 insertions(+), 1 deletion(-)
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git checkout -b "feature"
Switched to a new branch 'feature'
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git commit -a -m "commit1 in feature"
[feature 433223] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git commit -a -m "commit2 in feature"
[feature 71e763f] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git commit -a -m "commit3 in feature"
[feature 3ce2cbc] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git log --oneline
3ce2cbc (HEAD => feature) commit3 in feature
71e763f commit2 in feature
433223 commit1 in feature
710ce89 (master) commit2 in master
fdc8c72 commit1 in master
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git checkout master
Switched to branch 'master'
- dhruvat@sf-cpu-397:~/pracs/prac4\$ git cherry-pick "71e763f" "3ce2cbc"
Auto-merging prac4.txt
CONFLICT (content): Merge conflict in prac4.txt
error: The previous 'git add' command failed.
dhruvat@sf-cpu-397:~/pracs/prac4\$ git cherry-pick "71e763f" "3ce2cbc"
error: The previous 'git add' command failed.
hint: After resolving the conflicts, mark them with
hint: "git add/rm <pathspec>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".

> OUTLINE
> TIMELINE

prac4.txt - prac4 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt M

prac4.txt

```
1 this is prac4 before commit 1
2
3 before commit 2 in master
4
5 before c1 in feature
6
7 before c2 in feature
8
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

GNU nano 6.2 /home/dhruvval/pracs/prac4/.git/COMMIT_EDITMSG *

```
# Conflicts:
#   prac4.txt
# It looks like you may be committing a cherry-pick.
# If this is not correct, please run
#   git update-ref -d CHERRY_PICK_HEAD
# and try again.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:     Fri Feb 17 10:11:14 2023 +0530
#
# On branch master
# Cherry-pick currently in progress.
#
# Changes to be committed:
#   modified:   prac4.txt
#
```

OUTLINE TIMELINE

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line M-U Undo M-E Redo M-A Set Mark M-G Copy M-J To Bracket M-Q Where Was M-W Next

prac4.txt - prac4 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac4.txt M

prac4.txt

```
1 this is prac4 before commit 1
2
3 before commit 2 in master
4
5 before c1 in feature
6
7 before c2 in feature
8
9 before c3 in feature
10
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

GNU nano 6.2 /home/dhruvval/pracs/prac4/.git/COMMIT_EDITMSG *

```
commit3 in feature

# Conflicts:
#   prac4.txt
# It looks like you may be committing a cherry-pick.
# If this is not correct, please run
#   git update-ref -d CHERRY_PICK_HEAD
# and try again.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:     Fri Feb 17 10:11:29 2023 +0530
#
# On branch master
# Cherry-pick currently in progress.
#
# Changes to be committed:
#   modified:   prac4.txt
#
```

Read 22 lines

OUTLINE TIMELINE

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line M-U Undo M-E Redo M-A Set Mark M-G Copy M-J To Bracket M-Q Where Was M-W Next

Screenshot of a terminal window showing a cherry-pick operation in progress:

```
File Edit Selection View Go Run Terminal Help
EXPLORER ... Get Started prac4.txt M X
PRAC4
prac4.txt M
prac4.txt
1 this is prac4 before commit 1
2
3 before commit 2 in master
4
5 before c1 in feature
6
7 before c2 in feature
8
9 before c3 in feature
10

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
GNU nano 6.2
commit3 in feature edited

# Conflicts:
#   prac4.txt
# It looks like you may be committing a cherry-pick.
# If this is not correct, please run
#   git update-ref -d CHERRY_PICK_HEAD
# and try again.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
# Date:     Fri Feb 17 10:11:29 2023 +0530
# On branch master
# Cherry-pick currently in progress.
#
# Changes to be committed:
#   modified:   prac4.txt
#
```

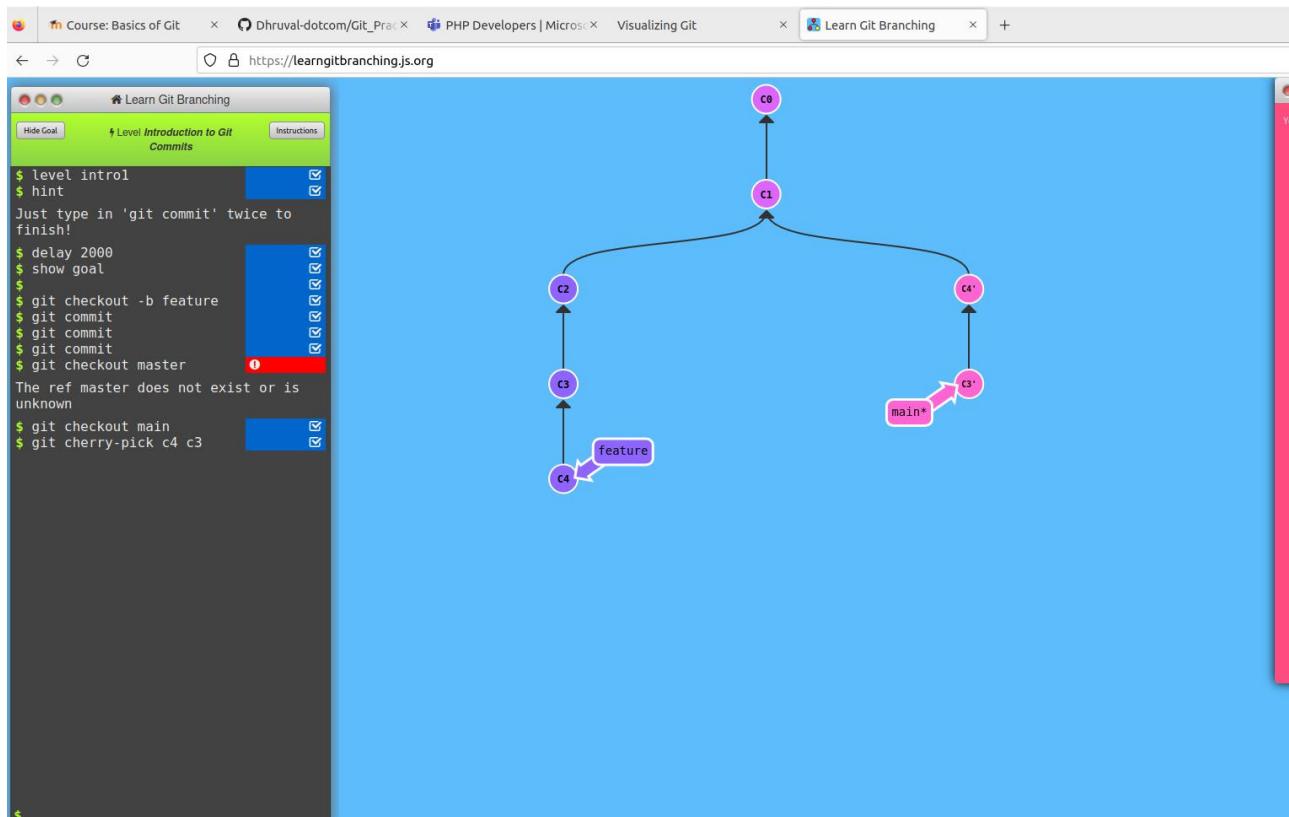
Outline Timeline Help Write Out Where Is Replace Cut Paste Execute Justify Go To Line Undo Redo Set Mark To Bracket Copy Where Was Next

Screenshot of a terminal window showing a cherry-pick operation in progress:

```
File Edit Selection View Go Run Terminal Help
EXPLORER ... Get Started prac4.txt X
PRAC4
prac4.txt
prac4.txt
1 this is prac4 before commit 1
2
3 before commit 2 in master
4
5 before c1 in feature
6
7 before c2 in feature
8
9 before c3 in feature
10

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
druruval@sf-cpu-397:~/pracs/prac4$ git cherry-pick --continue
[master cbf2604] commit2 in feature edited
Date: Fri Feb 17 10:11:14 2023 +0530
1 file changed, 2 insertions(+), 1 deletion(-)
Auto-merging prac4.txt
CONFLICT (content): Merge conflict in prac4.txt
error: could not apply 3ce2cbc... commit3 in feature
hint: After resolving the conflicts, mark them with
hint: "git add/rm <pathspec>", then run
hint: "git cherry-pick --continue".
hint: You can instead skip this commit with "git cherry-pick --skip".
hint: To abort and get back to the state before "git cherry-pick",
hint: run "git cherry-pick --abort".
druruval@sf-cpu-397:~/pracs/prac4$ git cherry-pick --continue
U prac4.txt
error: Committing is not possible because you have unmerged files.
hint: Fix them up in the work tree, and then use 'git add/rm <file>'.
hint: as appropriate to mark resolution and make a commit.
fatal: Exiting because of an unresolved conflict.
druruval@sf-cpu-397:~/pracs/prac4$ git add .
druruval@sf-cpu-397:~/pracs/prac4$ git cherry-pick --continue
[master 23c5967] commit3 in feature edited
Date: Fri Feb 17 10:11:29 2023 +0530
1 file changed, 2 insertions(+)
druruval@sf-cpu-397:~/pracs/prac4$ git log --oneline
23c5967 [HEAD -> master] commit3 in feature edited
cbf2604 commit2 in master
710c8e0 commit1 in master
fdcc8e72 commit in master
druruval@sf-cpu-397:~/pracs/prac4$
```

Outline Timeline Help Write Out Where Is Replace Cut Paste Execute Justify Go To Line Undo Redo Set Mark To Bracket Copy Where Was Next



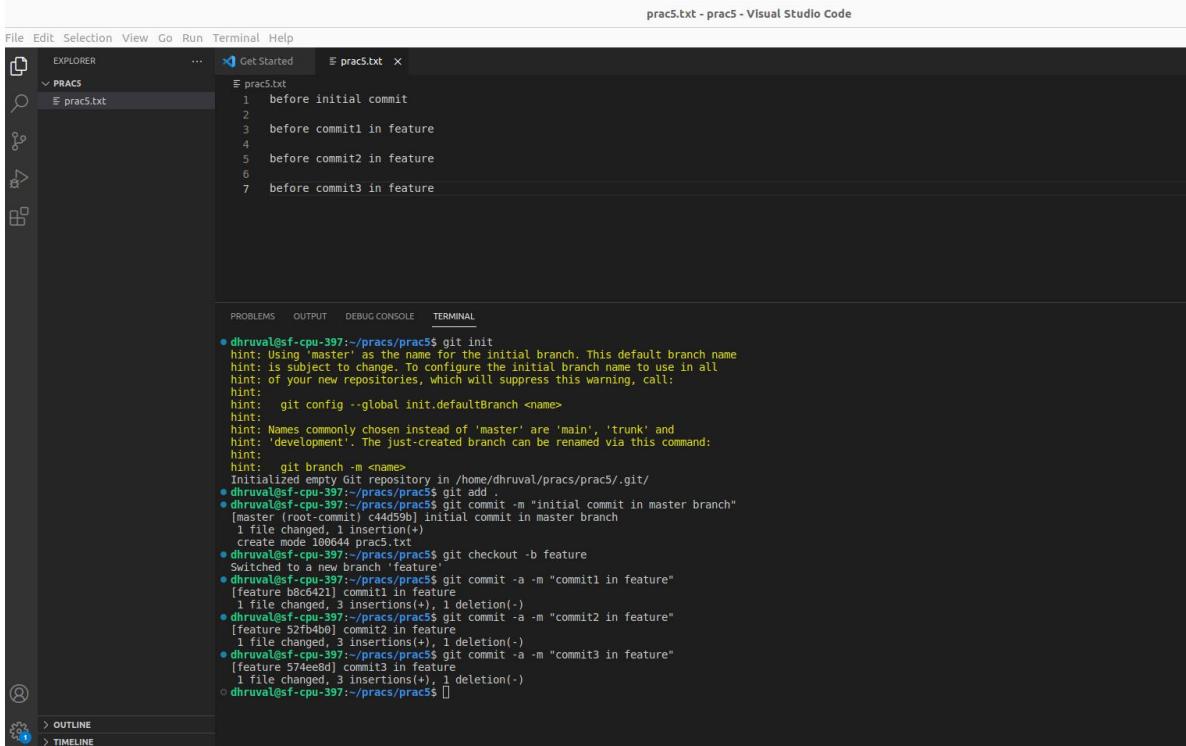
Main commands used

- git commit upto 2 times
- git checkout feature
- git commit 3 times in feature
- git checkout master
- git cherry-pick c2 c3

Practical-5 Drop Commit

Reset --hard:-git reset --hard option resets the current branch tip, and also deletes any changes in the working directory and staging area.

```
git reset --hard
```



The screenshot shows the Visual Studio Code interface with two terminal windows. The top terminal window displays the command history for creating a new repository and committing files. The bottom terminal window shows the command being run: `git reset --hard`. The output of this command is visible in both windows, indicating that the commit has been removed from the master branch.

```
prac5.txt - prac5 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER ... Get Started E prac5.txt
PRACS E prac5.txt
1 before initial commit
2
3 before commit1 in feature
4
5 before commit2 in feature
6
7 before commit3 in feature

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
● dhruvat@sf-cpu-397:~/pracs/prac5$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac5/.git/
● dhruvat@sf-cpu-397:~/pracs/prac5$ git add .
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -m "initial commit in master branch"
[master (root-commit c44d59b) initial commit in master branch
1 file changed, 3 insertions(+), 0 deletion(-)
create mode 100644 prac5.txt]
● dhruvat@sf-cpu-397:~/pracs/prac5$ git checkout -b feature
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit1 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit2 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit3 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
○ dhruvat@sf-cpu-397:~/pracs/prac5$ 
```



```
prac5.txt - prac5 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER ... Get Started E prac5.txt
PRACS E prac5.txt
1 before initial commit
2
3 before commit1 in feature
4
5 before commit2 in feature
6
7 before commit3 in feature

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
● dhruvat@sf-cpu-397:~/pracs/prac5$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruvat/pracs/prac5/.git/
● dhruvat@sf-cpu-397:~/pracs/prac5$ git add .
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -m "initial commit in master branch"
[master (root-commit c44d59b) initial commit in master branch
1 file changed, 3 insertions(+), 0 deletion(-)
create mode 100644 prac5.txt]
● dhruvat@sf-cpu-397:~/pracs/prac5$ git checkout -b feature
Switched to a new branch 'feature'
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit1 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit2 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit3 in feature
1 file changed, 3 insertions(+), 0 deletion(-)
● dhruvat@sf-cpu-397:~/pracs/prac5$ git log --oneline
574ee8d (HEAD --> feature) commit3 in feature
52fb4b0 commit2 in feature
b8c6421 commit1 in feature
c44d59b [master] initial commit in master branch
○ dhruvat@sf-cpu-397:~/pracs/prac5$ 
```

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pracs.txt

PRACS pracs.txt

```
1 before initial commit
2
3 before commit1 in feature
4
5 before commit2 in feature
6
7 before commit3 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -<name>
Initialized empty Git repository in /home/dhruval/pracs/pracs/.git/
● dhruval@sf-cpu-397:~/pracs/pracs$ git add .
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -m "initial commit in master branch"
[master (root-commit) c44d59b] initial commit in master branch
 1 file changed, 1 insertion(+)
  create mode 100644 pracs.txt
● dhruval@sf-cpu-397:~/pracs/pracs$ git checkout -b feature
Switched to a new branch 'feature'
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git log --oneline
574ee8d (HEAD -> feature) commit3 in feature
52fb4b0 commit2 in feature
b8c6421 commit in feature
c44d59b (master) initial commit in master branch
○ dhruval@sf-cpu-397:~/pracs/pracs$ git reset -hard HEAD~1
```

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pracs.txt

PRACS pracs.txt

```
1 before initial commit
2
3 before commit1 in feature
4
5 before commit2 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/dhruval/pracs/pracs/.git/
● dhruval@sf-cpu-397:~/pracs/pracs$ git add .
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -m "initial commit in master branch"
[master (root-commit) c44d59b] initial commit in master branch
 1 file changed, 1 insertion(+)
  create mode 100644 pracs.txt
● dhruval@sf-cpu-397:~/pracs/pracs$ git checkout -b feature
Switched to a new branch 'feature'
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit in feature
 1 file changed, 3 insertions(+), 1 deletion(-)
● dhruval@sf-cpu-397:~/pracs/pracs$ git log --oneline
574ee8d (HEAD -> feature) commit3 in feature
52fb4b0 commit2 in feature
b8c6421 commit in feature
c44d59b (master) initial commit in master branch
○ dhruval@sf-cpu-397:~/pracs/pracs$ git reset -hard HEAD~1
HEAD is now at 52fb4b0 commit2 in feature
○ dhruval@sf-cpu-397:~/pracs/pracs$
```

Screenshot captured
You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started pracs.txt

PRACS
pracs.txt

1 before initial commit
2
3 before commit1 in feature
4
5 before commit2 in feature

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: of your new repositories, which will suppress this warning, call:  
hint:  
hint: git config --global init.defaultBranch <name>  
hint:  
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and  
hint: 'development'. The just-created branch can be renamed via this command:  
hint:  
hint: git branch -m <name>  
Initialized empty Git repository in /home/dhruval/pracs/prac5/.git/  
● dhruval@sf-cpu-397:~/pracs/prac5$ git add .  
● dhruval@sf-cpu-397:~/pracs/prac5$ git commit -m "initial commit in master branch"  
[master (root-commit) c44d59b] initial commit in master branch  
1 file changed, 1 insertion(+)  
create mode 100644 pracs.txt  
● dhruval@sf-cpu-397:~/pracs/prac5$ git checkout -b feature  
Switched to a new branch 'feature'  
● dhruval@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit1 in feature"  
[feature b0c6c42] commit in feature  
1 file changed, 3 insertions(+), 1 deletion(-)  
● dhruval@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit2 in feature"  
[feature 52fb4b0] commit2 in feature  
1 file changed, 3 insertions(+), 1 deletion(-)  
● dhruval@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit3 in feature"  
[feature 574ee8d] commit3 in feature  
1 file changed, 3 insertions(+), 1 deletion(-)  
● dhruval@sf-cpu-397:~/pracs/prac5$ git log --oneline  
574ee8d (HEAD -> feature) commit3 in feature  
52fb4b0 commit2 in feature  
b0c6c421 commit1 in feature  
c44d59b (master) initial commit in master branch  
● dhruval@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1  
HEAD is now at 52fb4b0 commit2 in feature  
○ dhruval@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1[]
```

OUTLINE
TIMELINE

Screenshot captured
You can paste the image from the clipboard.

Screenshot captured
You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac5.txt

pracs

prac5.txt

```
1 before initial commit
2
3 c1 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruvraul/pracs/prac5/.git/
dhruvraul@sf-cpu-397:~/pracs/prac5$ git add .
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -m "initial commit in master branch"
[master (root-commit) c44d59b] initial commit in master branch
1 file changed, 1 insertion(+)
create mode 100644 prac5.txt
dhruvraul@sf-cpu-397:~/pracs/prac5$ git checkout -b feature
Switched to a new branch 'feature'
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git log --oneline
574ee8d (HEAD => feature) commit3 in feature
52fb4b0 commit2 in feature
b8c6421 commit1 in feature
c44d59b (master) initial commit in master branch
dhruvraul@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1
HEAD is now at 52fb4b0 commit2 in feature
dhruvraul@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1
HEAD is now at b8c6421 commit1 in feature
dhruvraul@sf-cpu-397:~/pracs/prac5$
```

OUTLINE TIMELINE

Screenshot captured
You can paste the image from the clipboard.

File Edit Selection View Go Run Terminal Help

EXPLORER ... Get Started prac5.txt

pracs

prac5.txt

```
1 before initial commit
2
3 c1 in feature
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
hint: git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint: git branch -m <name>
Initialized empty Git repository in /home/dhruvraul/pracs/prac5/.git/
dhruvraul@sf-cpu-397:~/pracs/prac5$ git add .
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -m "initial commit in master branch"
[master (root-commit) c44d59b] initial commit in master branch
1 file changed, 1 insertion(+)
create mode 100644 prac5.txt
dhruvraul@sf-cpu-397:~/pracs/prac5$ git checkout -b feature
Switched to a new branch 'feature'
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit1 in feature"
[feature b8c6421] commit1 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit2 in feature"
[feature 52fb4b0] commit2 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git commit -a -m "commit3 in feature"
[feature 574ee8d] commit3 in feature
1 file changed, 3 insertions(+), 1 deletion(-)
dhruvraul@sf-cpu-397:~/pracs/prac5$ git log --oneline
574ee8d (HEAD => feature) commit3 in feature
52fb4b0 commit2 in feature
b8c6421 commit1 in feature
c44d59b (master) initial commit in master branch
dhruvraul@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1
HEAD is now at 52fb4b0 commit2 in feature
dhruvraul@sf-cpu-397:~/pracs/prac5$ git reset --hard HEAD~1
HEAD is now at b8c6421 commit1 in feature
dhruvraul@sf-cpu-397:~/pracs/prac5$ git log --oneline[]
```

OUTLINE TIMELINE

Course: Basics of Git Dhruv-dotcom/Git_Practise PHP Developers | Microsoft Visualizing Git

git-school.github.io/visualizing-git/

Free Explore Local Repository

HEAD: feature

```
$ git checkout -b feature
$ git commit -m "c1 in feature"
$ git commit -m "c2 in feature"
$ git commit -m "c3 in feature"
```

```
$ git reset --hard HEAD~1
```

Course: Basics of Git Dhruv-dotcom/Git_Practise PHP Developers | Microsoft Visualizing Git

git-school.github.io/visualizing-git/

Free Explore Local Repository

HEAD: feature

```
$ git checkout -b feature
$ git commit -m "c1 in feature"
$ git commit -m "c2 in feature"
$ git commit -m "c3 in feature"
$ git reset --hard HEAD~1
```

```
$ git reset --hard HEAD~1
```

Course: Basics of Git Dhruv-dotcom/Git_Practise PHP Developers | Microsoft

git-school.github.io/visualizing-git/

Screenshot captured
You can paste the image from the clipboard.

Free Explore Local Repository

HEAD: feature

```
$ git checkout -b feature
$ git commit -m "c1 in feature"
feature
$ git Commit -m "c2 in feature"
$ git commit -m "c3 in feature"
$ git Reset --hard HEAD~1
$ git Reset --hard HEAD~1
```

Have fun!

Main commands used

- git commit
- git checkout -b feature
- git commit upto 3 times
- git reset -hard HEAD~1
- git reset -hard HEAD~1