

Git Assignment:

1. Pull and Merge difference:

- git pull

```
dev@sf-cpu-403: ~/Practicals/learn-git
dev@sf-cpu-403:~/Practicals/learn-git$ git commit
[feature-a 6e23ab5] feature-a file added.
1 file changed, 1 insertion(+)
create mode 100644 feature-a.txt
dev@sf-cpu-403:~/Practicals/learn-git$ ls
feature-1.txt feature2.txt feature-a.txt sample.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
dev@sf-cpu-403:~/Practicals/learn-git$ git pull
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (1/1), 628 bytes | 628.00 KiB/s, done.
From https://github.com/devmehta0/learn-git
   eb087a8..8bfc251  main       -> origin/main
Updating eb087a8..8bfc251
Fast-forward
 feature-1.txt | 1 +
 feature2.txt  | 1 +
2 files changed, 2 insertions(+)
create mode 100644 feature-1.txt
create mode 100644 feature2.txt
dev@sf-cpu-403:~/Practicals/learn-git$
```

- git merge – merging feature-a branch with main

```
dev@sf-cpu-403: ~/Practicals/learn-git
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (1/1), 628 bytes | 628.00 KiB/s, done.
From https://github.com/devmehta0/learn-git
   eb087a8..8bfc251  main       -> origin/main
Updating eb087a8..8bfc251
Fast-forward
 feature-1.txt | 1 +
 feature2.txt  | 1 +
2 files changed, 2 insertions(+)
create mode 100644 feature-1.txt
create mode 100644 feature2.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git branch -a
  feature-1
  feature-a
* main
  remotes/origin/feature-1
  remotes/origin/main
dev@sf-cpu-403:~/Practicals/learn-git$ git merge feature-a
Merge made by the 'ort' strategy.
 feature-a.txt | 1 +
1 file changed, 1 insertion(+)
create mode 100644 feature-a.txt
dev@sf-cpu-403:~/Practicals/learn-git$
```

- Pull request:

devmehta0 / learn-git Public

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base: main ← compare: feature-1 ✓ **Able to merge.** These branches can be automatically merged.

feature files added

Write Preview

H B I [Code](#) [Diff](#) [Files](#) [Comments](#) [More](#)

Leave a comment

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

Create pull request

1 commit

2 files changed

Commits on Feb 16, 2023

devmehta0 / learn-git Public

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

feature files added #1

Merged devmehta0 merged 1 commit into main from feature-1 now

Conversation 0

Commits 1

Checks 0

Files changed 2

devmehta0 commented now

No description provided.

feature files added 2b592f6

devmehta0 merged commit 8bfc251 into main now

Revert

Pull request successfully merged and closed

You're all set—the feature-1 branch can be safely deleted.

Delete branch

Write Preview

H B I [Code](#) [Diff](#) [Files](#) [Comments](#) [More](#)

Leave a comment

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

Comment

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

2

2. Rebase

- Rebased my-cool-feature branch to main.

```
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout my-cool-feature
Switched to branch 'my-cool-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ nano cool-feature
dev@sf-cpu-403:~/Practicals/learn-git$ git add .
dev@sf-cpu-403:~/Practicals/learn-git$ git commit
[my-cool-feature c15cd0e] first commit On branch my-cool-feature
1 file changed, 2 insertions(+)
create mode 100644 cool-feature
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout my-cool-feature
Switched to branch 'my-cool-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
dev@sf-cpu-403:~/Practicals/learn-git$ git pull
Already up to date.
dev@sf-cpu-403:~/Practicals/learn-git$ git rebase main
Current branch main is up to date.
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout my-cool-feature
Switched to branch 'my-cool-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ git rebase main
Current branch my-cool-feature is up to date.
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
dev@sf-cpu-403:~/Practicals/learn-git$ git rebase my-cool-feature
Successfully rebased and updated refs/heads/main.
dev@sf-cpu-403:~/Practicals/learn-git$
```

3. Change commit message:

Git commit --amend -m <message>

```
dev@sf-cpu-403: ~/Practicals/learn-git
2 files changed, 2 insertions(+)
create mode 100644 feature-1.txt
create mode 100644 feature2.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git branch -a
  feature-1
  feature-a
* main
  remotes/origin/feature-1
  remotes/origin/main
dev@sf-cpu-403:~/Practicals/learn-git$ git merge feature-a
Merge made by the 'ort' strategy.
 feature-a.txt | 1 +
1 file changed, 1 insertion(+)
create mode 100644 feature-a.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git commit -amend -m "demonstration of reb
ase"
error: did you mean '--amend' (with two dashes)?
dev@sf-cpu-403:~/Practicals/learn-git$ git commit --amend -m "demonstration of re
base"
[main 1fab41] demonstration of rebase
Date: Thu Feb 16 15:54:43 2023 +0530
1 file changed, 2 insertions(+)
create mode 100644 cool-feature
dev@sf-cpu-403:~/Practicals/learn-git$
```

4. Cherry pick

- created new branch named 'cherry-pick-feature'.
- made some commits and then picked one commit and added to the main branch

```
dev@sf-cpu-403:~/Practicals/learn-git$ git branch cherry-pick-feature
dev@sf-cpu-403:~/Practicals/learn-git$ git branch -a
cherry-pick-feature
feature-1
feature-a
main
my-cool-feature
remotes/origin/feature-1
remotes/origin/main
dev@sf-cpu-403:~/Practicals/learn-git$ nano cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$ ls
cool-feature  feature-1.txt  feature2.txt  feature-a.txt  sample.txt
dev@sf-cpu-403:~/Practicals/learn-git$ file file.txt
file.txt: command not found
dev@sf-cpu-403:~/Practicals/learn-git$ nano file.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout cherry-pick-feature
Switched to branch 'cherry-pick-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ git commit
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
dev@sf-cpu-403:~/Practicals/learn-git$ git add .
dev@sf-cpu-403:~/Practicals/learn-git$ git commit
[main 47c6f47] get ahead one commit to demonstrate cherry picking
1 file changed, 1 insertion(+)
create mode 100644 file.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout cherry-pick-feature
Switched to branch 'cherry-pick-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ nano cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git add .
dev@sf-cpu-403:~/Practicals/learn-git$ git status
On branch cherry-pick-feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git commit
[cherry-pick-feature a90417d] cp file added
1 file changed, 1 insertion(+)
create mode 100644 cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
dev@sf-cpu-403:~/Practicals/learn-git$ git cherry-pick cherry-pick-feature
Switched to branch 'cherry-pick-feature'
dev@sf-cpu-403:~/Practicals/learn-git$ nano cp.txt
```

```
dev@sf-cpu-403:~/Practicals/learn-git$ git log
a90417d cp file added
b2e20b6 (origin/main) demonstration of rebase
ec8a3d3 Merge branch 'feature-a'
6e23ab5 (feature-a) feature-a file added.
8bf2c51 Merge pull request #1 from devnehta0/feature-1
2b502f6 (origin/feature-1, feature-1) feature files added
eb087a8 Initial commit
dev@sf-cpu-403:~/Practicals/learn-git$ git status
On branch cherry-pick-feature
Your branch is up to date with 'origin/cherry-pick-feature'.
nothing to commit, working tree clean
dev@sf-cpu-403:~/Practicals/learn-git$ git cherry
cherry cherry-pick
dev@sf-cpu-403:~/Practicals/learn-git$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
dev@sf-cpu-403:~/Practicals/learn-git$ git cherry-pick a90417d
[main 51ab56a] cp file added
1 file changed, 1 insertion(+)
create mode 100644 cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$ git log
commit 51ab56a77b517b2c37c4e9f495cc0c0115a9 (HEAD -> main)
Author: devnehta0 <dev.d@informaticsolutions.com>
Date: Fri Feb 17 18:48:51 2023 +0530
    cp file added
    new file:   cp.txt
commit 47c6f475af3de52fda7aebf4014c28f8d3824e
Author: devnehta0 <dev.d@informaticsolutions.com>
Date: Fri Feb 17 18:46:36 2023 +0530
    get ahead one commit to demonstrate cherry picking
    new file:   file.txt
commit b2e20b654cae8f94dca1bb09091f6d3ed820 (origin/main)
Author: devnehta0 <dev.d@informaticsolutions.com>
Date: Thu Feb 16 15:54:43 2023 +0530
    demonstration of rebase
commit ec8a3d38632604e2378ac78a417f1a25b08fc9b2
Merge: 8b6f254 6e23ab5
```

5. Drop commit

- git reset --hard HEAD~<number of commits behind head>

```

dev@sf-cpu-403:~/Practicals/learn-git$ git branch -a
* cherry-pick-feature
  feature-1
  feature-a
  main
  my-cool-feature
  remotes/origin/main
dev@sf-cpu-403:~/Practicals/learn-git$ git reset --hard HEAD
HEAD is now at 0497bf2 cp file modified
dev@sf-cpu-403:~/Practicals/learn-git$ git log
commit 0497bf21d9f4928a838496c53f426577300c5130 (HEAD -> cherry-pick-feature)
Author: devmehta0 <dev.d@simformsolutions.com>
Date:   Fri Feb 17 10:50:38 2023 +0530

    cp file modified

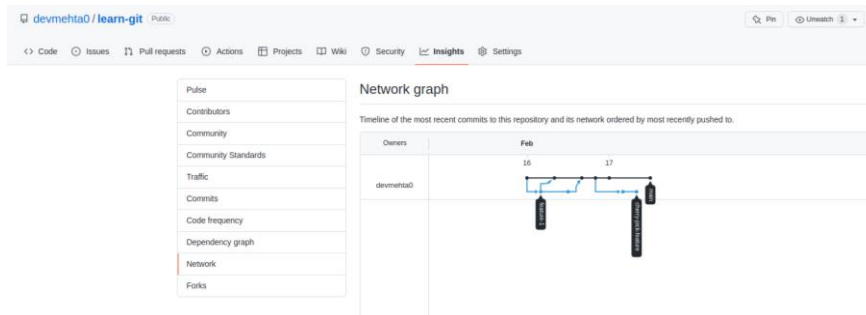
commit a90417da78bec059dd9ee495417d01b28d92fc98
Author: devmehta0 <dev.d@simformsolutions.com>
Date:   Fri Feb 17 10:48:51 2023 +0530

    cp file added
    new file:   cp.txt

commit bae2ebe6a54ceae8f94dca41bbb9091f6d3ed820
Author: devmehta0 <dev.d@simformsolutions.com>
dev@sf-cpu-403:~/Practicals/learn-git$ git reset --hard HEAD
HEAD is now at 0497bf2 cp file modified
dev@sf-cpu-403:~/Practicals/learn-git$ git reset --hard HEAD~1
HEAD is now at a90417d cp file added    new file:   cp.txt
dev@sf-cpu-403:~/Practicals/learn-git$

```

Before deleting commit from ‘cherry-pick-feature’ branch.



After deleting ‘HEAD~1’ commit from ‘cherry-pick feature’ branch.

