

Git Practical Exam

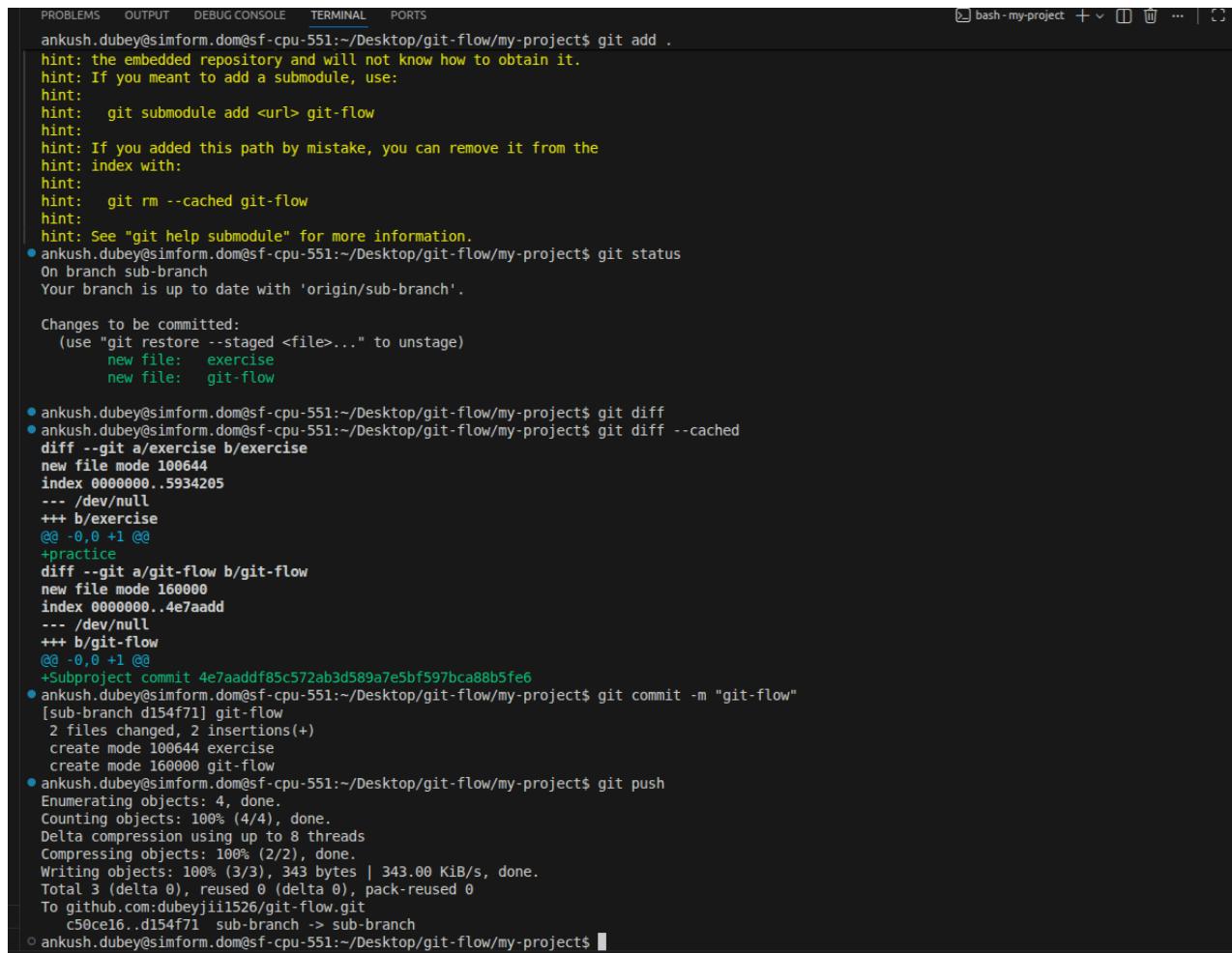
Git Exercise:

1. Create a new repository with a template.

The screenshot shows the 'General' settings page for a GitHub repository named 'git-flow'. The 'Template repository' checkbox is checked, indicating that this repository can be used as a template to generate new repositories. The 'Default branch' is set to 'main'. The 'Social preview' section is visible at the bottom.

2.Initialize git-flow.

Command:- git init



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git add .
hint: the embedded repository and will not know how to obtain it.
hint: If you meant to add a submodule, use:
hint:
hint:   git submodule add <url> git-flow
hint:
hint: If you added this path by mistake, you can remove it from the
hint: index with:
hint:
hint:   git rm --cached git-flow
hint:
hint: See "git help submodule" for more information.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git status
On branch sub-branch
Your branch is up to date with 'origin/sub-branch'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   exercise
    new file:   git-flow

● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git diff
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git diff --cached
diff --git a/exercise b/exercise
new file mode 100644
index 000000..5934205
--- /dev/null
+++ b/exercise
@@ -0,0 +1 @@
+practice
diff --git a/git-flow b/git-flow
new file mode 160000
index 000000..4e7aadd
--- /dev/null
+++ b/git-flow
@@ -0,0 +1 @@
+Subproject commit 4e7aaddf85c572ab3d589a7e5bf597bca88b5fe6
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git commit -m "git-flow"
[sub-branch d154f71] git-flow
 2 files changed, 2 insertions(+)
   create mode 100644 exercise
   create mode 160000 git-flow
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 343 bytes | 343.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:dubeyjii1526/git-flow.git
 c50ce16..d154f71 sub-branch -> sub-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$
```

3.Create a feature branch for project setup with the proper Zoho task ID (example: TP2-T1299_Project_Setup).

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git checkout -b TE-T109Basics-of-git
Switched to a new branch 'TE-T109Basics-of-git'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ touch README.md
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git commit -m "Initial setup"
[TE-T109Basics-of-git (root-commit) eb35f57] Initial setup
 1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 README.md
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git branch
* TE-T109Basics-of-git
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git remote -v origin git@github.com:dubeyjii1526/git-flow.git
error: Unknown subcommand: origin
usage: git remote [-v | --verbose]
  or: git remote add [-t <branch>] [-m <master>] [-f] [--tags | --no-tags] [--mirror=<fetch|push>] <name> <url>
  or: git remote rename <old> <new>
  or: git remote remove <name>
  or: git remote set-head <name> (-a | --auto | -d | --delete | <branch>)
  or: git remote [-v | --verbose] show [-n] <name>
  or: git remote prune [-n | --dry-run] <name>
  or: git remote [-v | --verbose] update [-p | --prune] [(<group> | <remote>)...]
  or: git remote set-branches [-add] <names> <branch>...
  or: git remote get-url [--push] [--all] <name>
  or: git remote set-url [--push] <name> <newurl> [<oldurl>]
  or: git remote set-url --add <name> <newurl>
  or: git remote set-url --delete <name> <url>

-v, --verbose      be verbose; must be placed before a subcommand
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git remote add origin git@github.com:dubeyjii1526/git-flow.git
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push origin TE-T109Basics-of-git
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 217 bytes | 217.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'TE-T109Basics-of-git' on GitHub by visiting:
remote:   https://github.com/dubeyjii1526/git-flow/pull/new/TE-T109Basics-of-git
remote:
To github.com:dubeyjii1526/git-flow.git
 * [new branch]      TE-T109Basics-of-git -> TE-T109Basics-of-git
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git checkout sub-branch
error: pathspec 'sub-branch' did not match any file(s) known to git
```

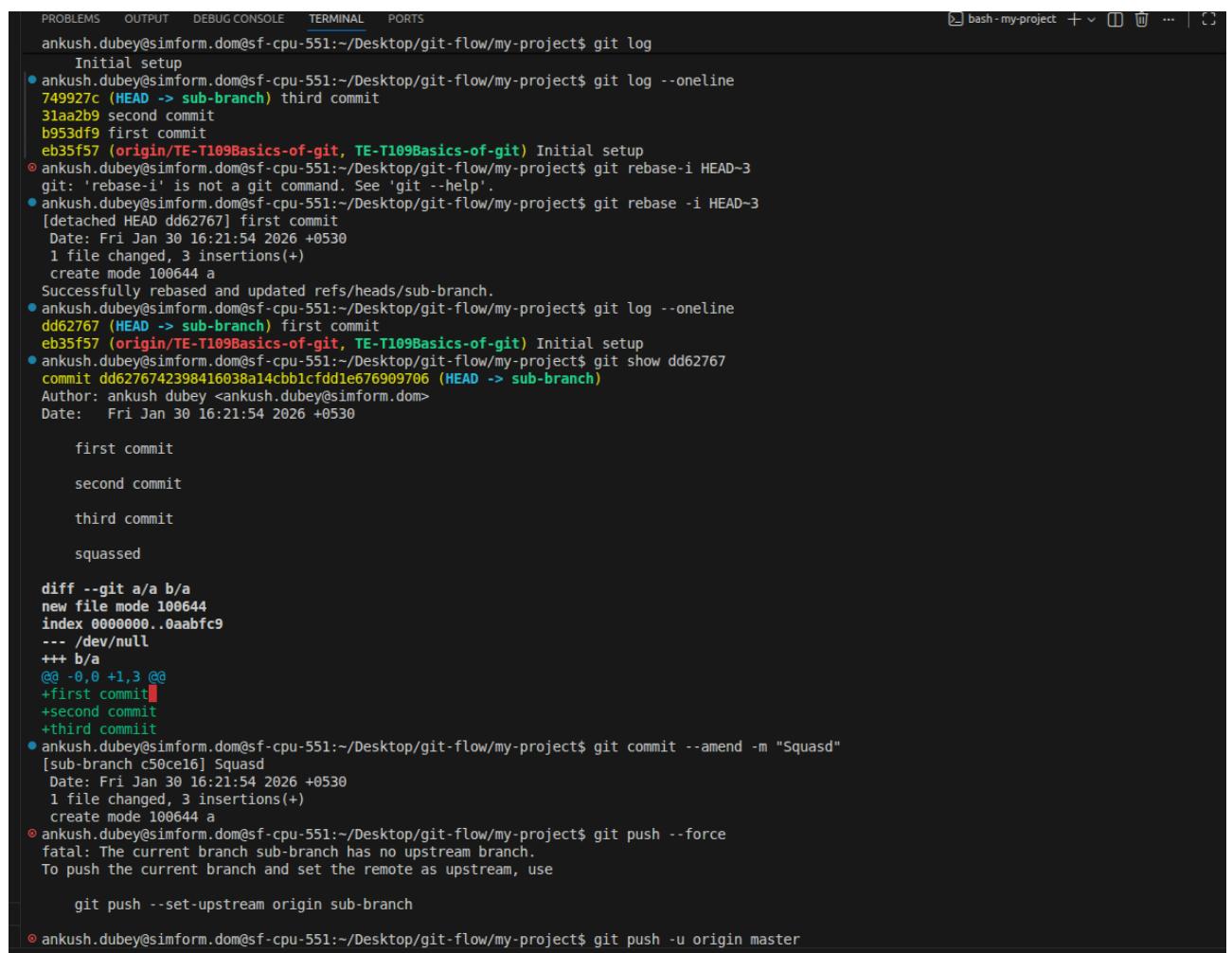
4.Create a sub-branch from the project setup branch and perform squash, reset, rebase and cherrypick.

Squash:-process of taking multiple commits and condensing them into a single, unified commit.

Command:-
git rebase -i HEAD~3
-complete squash in nano
-CTRL O+ ENTER +CTRL X

CHECK LOG AND STATUS

git log
git status



The screenshot shows a terminal window titled "bash - my-project". The terminal displays the output of several git commands:

- Initial setup
- git log --oneline shows three commits:
 - 749927c (HEAD -> sub-branch) third commit
 - 31aa2b9 second commit
 - b953df9 first commit
- git log --oneline shows the rebased history:
 - eb35f57 (origin/TE-T109Basics-of-git, TE-T109Basics-of-git) Initial setup
 - dd62767 (HEAD -> sub-branch) first commit
 - eb35f57 (origin/TE-T109Basics-of-git, TE-T109Basics-of-git) Initial setup
 - commit dd6276742398416038a14cb1cfdd1e676909706 (HEAD -> sub-branch)
- git show dd6276742398416038a14cb1cfdd1e676909706 shows the commit details.
- git log --oneline shows the final state after squashing:
 - first commit
 - second commit
 - third commit
 - squashed
- diff --git a/a b/a shows the diff between the original and the squashed commit.
- git commit --amend -m "Squad" creates a new commit "Squad" on the sub-branch.
- git push --force fatal: The current branch sub-branch has no upstream branch. To push the current branch and set the remote as upstream, use git push --set-upstream origin sub-branch.
- git push -u origin master pushes the changes to the master branch.

reset:- Used to move the current branch pointer (HEAD) to a specific previous commit.

Command:-git reset HEAD reset

```
c50ce10..0124f71  sub-branch -> sub-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ touch reset
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git reset HEAD reset
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git status
On branch sub-branch
Your branch is up to date with 'origin/sub-branch'.

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

nothing added to commit but untracked files present (use "git add" to track)
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git log
commit d154f715ffb1800051fdca014fff40328837169b (HEAD -> sub-branch, origin/sub-branch)
Author: ankush dubey <ankush.dubey@simform.dom>
Date:   Fri Jan 30 16:51:02 2026 +0530

git-flow

commit c50ce163a67e875f87e043d968150e40f8e25a39
Author: ankush dubey <ankush.dubey@simform.dom>
Date:   Fri Jan 30 16:21:54 2026 +0530

Squasd

commit eb35f5779131c071dc5c33e512f0ae382b617f7d (origin/TE-T109Basics-of-git, TE-T109Basics-of-git)
Author: ankush dubey <ankush.dubey@simform.dom>
Date:   Fri Jan 30 16:12:12 2026 +0530

Initial setup
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$
```

Rebase:- process of moving or combining a sequence of commits to a new base commit.

Command :- git checkout sub-branch
git rebase branch-name

```
Initial setup
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git branch
  TE-T109Basics-of-git
* sub-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git rebase sub-branch
Current branch sub-branch is up to date.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git rebase TE-T109Basics-of-git
Current branch sub-branch is up to date.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git branch
  TE-T109Basics-of-git
* sub-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git switch TE-T109Basics-of-git
warning: unable to rmdir 'git-flow': Directory not empty
Switched to branch 'TE-T109Basics-of-git'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git rebase sub-branch
Successfully rebased and updated refs/heads/TE-T109Basics-of-git.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push origin TE-T109Basics-of-git
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
```

cherrypick:- It is the act of choosing a specific commit from one branch and applying it to another.

Command:- git cherry-pick Hash-code

```
④ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git cherry-pick 4e7aaddir85c572ab3d589a7e5bf597bca88b5fe6
fatal: bad object 4e7aaddir85c572ab3d589a7e5bf597bca88b5fe6
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git fetch --all
Fetching origin
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 3 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (4/4), 84.22 KiB | 205.00 KiB/s, done.
From github.com:dubeyjii1526/git-flow
 * [new branch]      main      -> origin/main
Auto-merging README.md
[TE-T109Basics-of-git 2882c2b] Initial commit
  Author: dubeyjii1526 <ankushkumar.119196@marwadiuniversity.ac.in>
  Date: Fri Jan 30 15:57:06 2026 +0530
  2 files changed, 2 insertions(+)
  create mode 100644 IMG-20250401-WA0005.jpg
④ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push
fatal: The current branch TE-T109Basics-of-git has no upstream branch.
To push the current branch and set the remote as upstream, use

  git push --set-upstream origin TE-T109Basics-of-git

● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push -u origin TE-T109Basics-of-git
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 83.74 KiB | 7.61 MiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:dubeyjii1526/git-flow.git
 d154f71..2882c2b  TE-T109Basics-of-git -> TE-T109Basics-of-git
Branch 'TE-T109Basics-of-git' set up to track remote branch 'TE-T109Basics-of-git' from 'origin'.
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ █
```

Practice below mentioned scenario and decide which one to use from rebase, cherry-pick, reset or squash and how

1.Create a branch from the develop.

Command :- git checkout develop
git checkout -b BranchName

```
remote: Create a pull request for 'develop' on GitHub by visiting:
remote:     https://github.com/dubeyjii1526/git-flow/pull/new/develop
remote:
To github.com:dubeyjii1526/git-flow.git
 * [new branch]      develop -> develop
 ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git pull
 ^C
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git branch
 * develop
   sub-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git branch -D TE-T109Basics-of-git
error: branch 'TE-T109Basics-of-git' not found.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git push origin --delete TE-T109Basics-of-git
To github.com:dubeyjii1526/git-flow.git
  - [deleted]          TE-T109Basics-of-git
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git checkout -b TE-T109Basics-of-git
Switched to a new branch 'TE-T109Basics-of-git'
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ []
```

2.Add a commit message hook to the repo.

Command:- mv file.sample file
chmod +x file
execute a commit

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ chmod +x pre-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ chmod +x .git/hooks/pre-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ ls
applypatch-msg.sample    post-update.sample    pre-merge-commit.sample    pre-rebase.sample    update.sample
commit-msg.sample        pre-applypatch.sample  prepare-commit-msg.sample  pre-receive.sample
fsmonitor-watchman.sample pre-commit           pre-push.sample       push-to-checkout.sample
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ ls -a pre-commit
pre-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ ls -la pre-commit
-rwxr-xr-x 1 ankush.dubey@simform.dom domain users@simform.dom 17 Jan 30 18:19 pre-commit
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/.git/hooks$ []
```

```
[TE-T109Basics-of-git 869c90e] Check
Date: Fri Jan 30 18:31:33 2026 +0530
1 file changed, 2 insertions(+), 1 deletion(-)
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ gedit add
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ git commit --amend -m "hook"
Hook
[TE-T109Basics-of-git de663ad] hook
Date: Fri Jan 30 18:31:33 2026 +0530
1 file changed, 3 insertions(+), 1 deletion(-)
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$
```

3. Perform multiple commits in the new branch.

Command:- git commit -m “msg”

```
new-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git add simform.txt
fatal: pathspec 'simform.txt' did not match any files
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ touch simform.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git add simform.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git commit -m "first commit"
-----
✖ ERROR: Invalid commit message format.
Your message: 'first commit'
Expected format: 'feat: description' or 'fix: description'
-----
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git commit -m "feat: first commit"
[develop 8772ca4] feat: first commit
1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 simform.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ touch simform1.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git add simform1.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git commit -m "feat: Second commit"
[develop d898172] feat: Second commit
1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 simform1.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ touch simform2.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git add simform2.txt
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$ git commit -m "feat: Third commit"
[develop 4400180] feat: Third commit
1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 simform2.txt
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/Basics Of Git$
```

```
commit d8981723b571a336057af1970aad664a5c9baf90 (HEAD -> develop)
Author: ankush dubey <ankush.dubey@simform.dom>
Date: Thu Jan 29 19:17:47 2026 +0530

feat: Second commit

commit 8772ca4c48473063bc98cc65a099d1064638a04d
Author: ankush dubey <ankush.dubey@simform.dom>
Date: Thu Jan 29 19:16:58 2026 +0530

feat: first commit

commit d781d8356fd84d7e691a21d07ce60b467249b6dd
Author: ankush dubey <ankush.dubey@simform.dom>
Date: Thu Jan 29 19:05:14 2026 +0530

feat: add user login validation

commit 7c10325142ee84bf928bd5473727d979c54fd1b7 (origin/master, new-branch, new, master)
Author: ankush dubey <ankush.dubey@simform.dom>
Date: Thu Jan 29 17:21:21 2026 +0530

up

commit 228a1c247b70f2b42fa44c0dce13fc9331338b16
Author: ankush dubey <ankush.dubey@simform.dom>
Date: Thu Jan 29 17:16:12 2026 +0530

Add Php File
:[]
```

4.Create PR to develop.

The screenshot shows a GitHub pull request page for a repository named 'dubeyjii1526 / git-flow'. The pull request is titled 'Feature branch #2' and is currently 'Open'. It has 4 commits from the 'feature-branch' into the 'develop' branch. The commits are:

- changed message (a87e2b2)
- first commit (e62bab)
- second commit (3316a16)
- work in progress (519b0f0)

A comment from 'dubeyjii1526' is visible, stating 'Creating a PR in Develop'. A note at the bottom left says 'No conflicts with base branch' and 'Merging can be performed automatically.' A 'Merge pull request' button is present at the bottom left. On the right side, there are sections for Reviewers, Assignees, Labels, Projects, Milestone, Development, and Notifications. The 'Development' section notes that successfully merging may close issues. The 'Notifications' section includes a 'Customize' link.

5.PR should be small in size, It's recommended to do one commit per PR. However, based on the situation we can have multiple commits in PR. e.g. if someone is doing 10 bug fixes which are one-liner fixes in such cases instead of 10 different PRs you can do 10 commits in a single PR.

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow$ git branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow$ cd my-project/
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project$ cd git-flow/
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git branch
 * main
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout -b "new-branch"
Switched to a new branch 'new-branch'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ touch multiple-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git add .
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commt -m "first commit"
git: 'commt' is not a git command. See 'git --help'.
```

The most similar command is

commit

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commit -m "first commit"
[new-branch fed66bd] first commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 multiple-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ gedit multiple-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commit -m "second commit"
[new-branch acc5613] second commit
 1 file changed, 1 insertion(+)
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ gedit multiple-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commit -m "third commit"
[new-branch 14d98e7] third commit
 1 file changed, 1 insertion(+)
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git rebase -i HEAD~3
[detached HEAD 2f7c529] first commit
 Date: Mon Feb 2 10:47:17 2026 +0530
```

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git rebase -i HEAD~3
[detached HEAD 2f7c529] first commit
 Date: Mon Feb 2 10:47:17 2026 +0530
 1 file changed, 2 insertions(+)
 create mode 100644 multiple-commit
Successfully rebased and updated refs/heads/new-branch.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git status
On branch new-branch
 nothing to commit, working tree clean
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git log
commit 2f7c52916fb11b5fdd26089615b902de2e8dde6a (HEAD -> new-branch)
Author: ankush dubey <ankush.dubey@simform.dom>
Date:   Mon Feb 2 10:47:17 2026 +0530

  first commit
  second commit
  third commit
```

Soltion of question5

```
commit 4e7aaddf85c572ab3d589a7e5bf597bca88b5fe6 (origin/main, origin/HEAD, main)
Author: dubeyjii1526 <ankushkumar.119196@marwadiuniversity.ac.in>
Date:   Fri Jan 30 15:57:06 2026 +0530
```

Initial commit

```
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git log --oneline
2f7c529 (HEAD -> new-branch) first commit
4e7aadd (origin/main, origin/HEAD, main) Initial commit
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ █
```

Screenshot of a GitHub Pull Request page titled "Feature task2/add commit hook #1".

The pull request has 2 commits and 1 file changed.

Comments:

- dubeyji1526 commented now: "No description provided."
- ankush dubey added 2 commits 1 hour ago:
 - first commit ... (commit hash: 2f7c529)
 - question7 solution (commit hash: d344557)

Add a comment:

Write Preview

Add your comment here...

Reviewers: No reviews. Still in progress? Convert to draft.

Assignees: No one—assign yourself.

Labels: None yet.

Projects: None yet.

Milestone: No milestone.

Development: Successfully merging this pull request may close these issues. None yet.

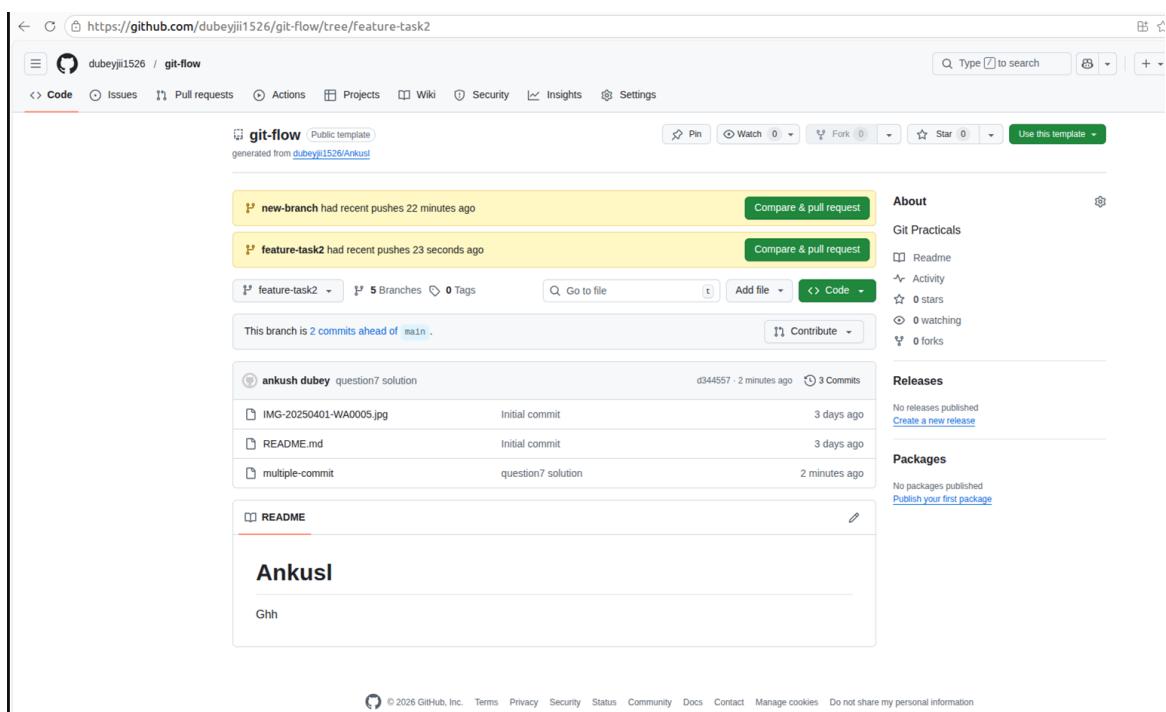
Notifications: Customize. You're receiving notifications because you authored the thread. Unsubscribe.

6.Create another branch from develop given your previous PR is still in review state.

```
* new-branch 2f/c529 first commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git switch develop
Switched to branch 'develop'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout -b "feature-task2"
Switched to a new branch 'feature-task2'
○ ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$
```

7.Now commit something in your current branch and push it.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git switch develop
Switched to branch 'develop'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout -b "feature-task2"
Switched to a new branch 'feature-task2'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ ls
IMG-20250401-WA0005.jpg  multiple-commit README.md
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ gedit multiple-commit
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git add .
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commit -m "question7 solution"
[feature-task2 d344557] question7 solution
 1 file changed, 2 insertions(+)
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin develop
To github.com:dubeyjii1526/git-flow.git
 ! [rejected]        develop -> develop (fetch first)
error: failed to push some refs to 'github.com:dubeyjii1526/git-flow.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push -h' for details.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git branch
  develop
* feature-task2
  main
  new-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin feature-task2
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
```



8.In the meantime, your previous PR has been merged to develop.

The screenshot shows a GitHub pull request page for a repository named 'git-flow'. The pull request has been merged by 'dubeyjii1526' into the 'main' branch. The commit history shows two commits from 'ankush dubey': 'first_commit' and 'question7_solution'. The pull request has been closed successfully. On the right side, there are sections for 'Reviewers', 'Assignees', 'Labels', 'Projects', 'Milestone', 'Development', and 'Notifications'. A comment section at the bottom allows users to add comments in Markdown format.

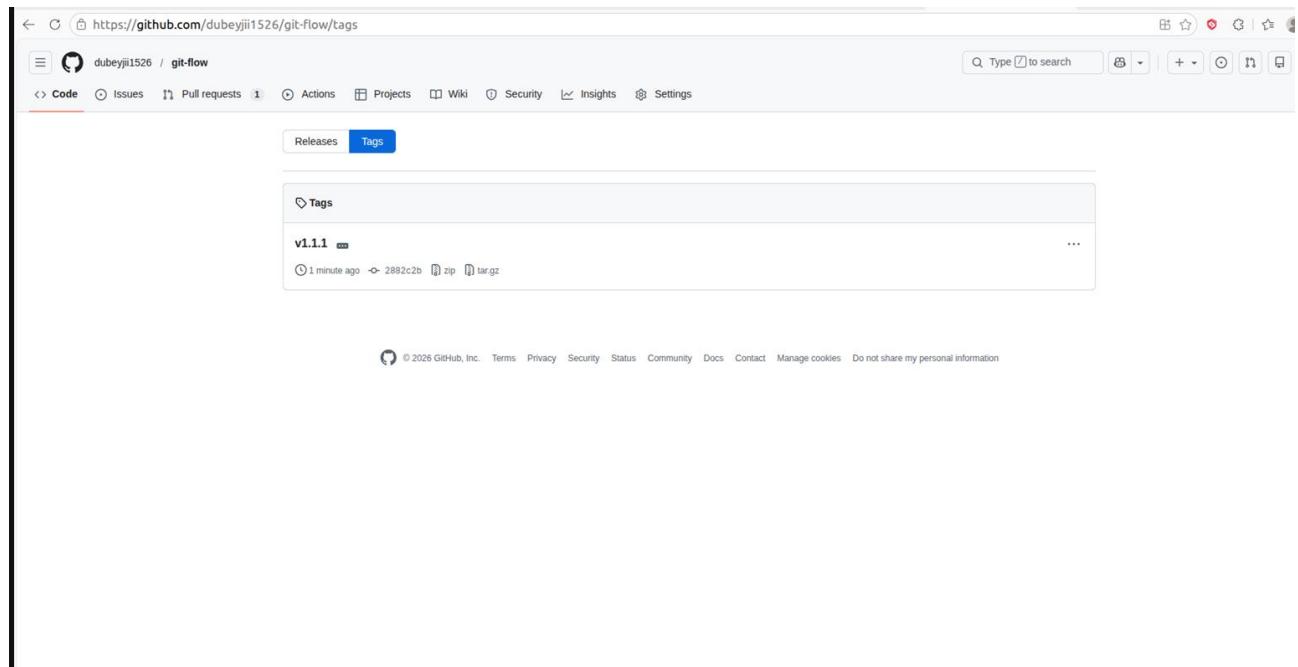
The screenshot shows a GitHub pull request page for a repository named 'git-flow'. The pull request is currently being merged by 'dubeyjii1526'. The commit history shows two commits from 'ankush dubey': 'first_commit' and 'question7_solution'. A 'Commit message' field contains 'Merge pull request #1 from dubeyjii1526/feature-task2'. An 'Extended description' field contains 'Feature task2/add solution for question 8'. Below the commit message, a note states 'This commit will be authored by ankushkumar.119196@marwadiuniversity.ac.in.'. At the bottom, there are 'Confirm merge' and 'Cancel' buttons. The right side of the page displays standard GitHub merge metadata and participant information.

9.Create a PR for the current branch given your branch should be up to date with develop branch.

The screenshot shows a GitHub pull request interface. The title of the PR is "Feature task2/add commit hook #1". The PR is open and has 2 commits from the author "dubeyjii1526". The commits are "first commit" and "question7 solution". The PR has 0 reviews, 0 assignees, 0 labels, and 0 projects. It is still in progress. The developer can add a comment or preview their changes. Notifications are customized, and the developer is unsubscribing from notifications.

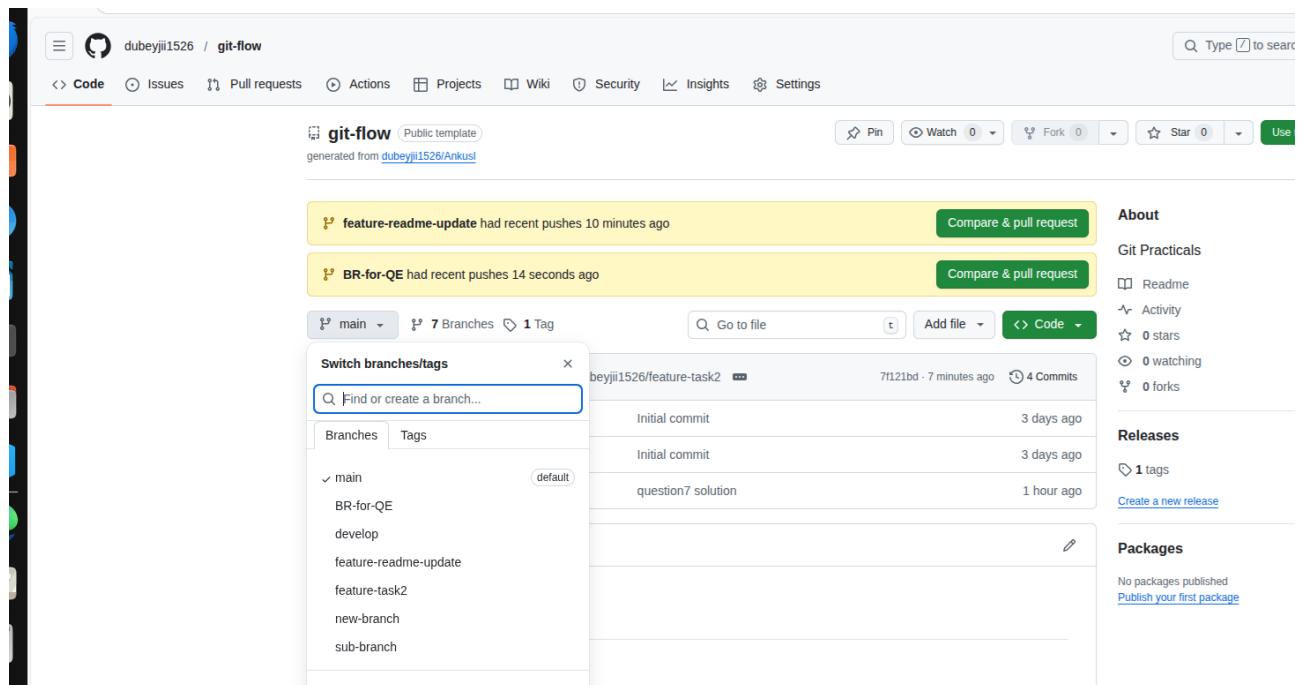
10. For any new build release add a version tag to that specific commit to keep track of each version.

```
feature-task2
main
* new-branch
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout develop
Switched to branch 'develop'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git pull origin develop
From github.com:dubeyjii1526/git-flow
 * branch            develop    -> FETCH_HEAD
Already up to date.
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git tag -a v1.1.1 -m "new-build release"
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git tag
Command 'gitt' not found, did you mean:
 command 'gist' from deb yorick (2.2.04+dfsg1-12)
 command 'git' from deb git (1:2.34.1-1ubuntu1.15)
 command 'gitit' from deb gitit (0.13.0.0+dfsg-2build5)
Try: apt install <deb name>
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git tag v1.1.1
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin --tags all tags
error: src refspec all does not match any
error: src refspec tags does not match any
error: failed to push some refs to 'github.com:dubeyjii1526/git-flow.git'
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin v1.1.1
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 169 bytes | 169.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:dubeyjii1526/git-flow.git
 * [new tag]           v1.1.1 -> v1.1.1
● ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$
```



11.Create 2 another branch (3rd and 4th) from develop, push read me changes to 3rd brach.

```
ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git push origin v1.1.1
To github.com:dubeyjii1526/git-flow.git
 * [new tag]           v1.1.1 -> v1.1.1
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git checkout develop
Already on 'develop'
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git checkout -b feature-readme-update
Switched to a new branch 'feature-readme-update'
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ gedit README.md
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git add README.md
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git commit -m "changes for question 11"
[feature-readme-update 4a4d20f] changes for question 11
1 file changed, 1 insertion(+)
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git push -u origin feature-readme-update
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature-readme-update' on GitHub by visiting:
remote:     https://github.com/dubeyjii1526/git-flow/pull/new/feature-readme-update
remote:
To github.com:dubeyjii1526/git-flow.git
 * [new branch]           feature-readme-update -> feature-readme-update
Branch 'feature-readme-update' set up to track remote branch 'feature-readme-update' from 'origin'.
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git checkout develop
Switched to branch 'develop'
• ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git checkout -b BR-for-QE
Switched to a new branch 'BR-for-QE'
```



12.Cherry pick 3rd branch's commit to 4th branch.

```
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git branch
* BR-for-QE
  develop
    feature-readme-update
    feature-task2
  main
  new-branch
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout feature-readme-update
Switched to branch 'feature-readme-update'
Your branch is up to date with 'origin/feature-readme-update'.
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git log feature-readme-update --oneline -n 1
4a4d20f (HEAD -> feature-readme-update, origin/feature-readme-update) changes for question 11
2882c2b (tag: v1.1.1, origin/sub-branch, origin/develop, origin/BR-for-QE, develop, BR-for-QE) Initial commit
d154f71 git-flow
c50ce16 Squasd
eb35f57 (origin/TE-T109Basics-of-git) Initial setup
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git checkout BR-for-QE
Switched to branch 'BR-for-QE'
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git cherry-pick 4a4d20f [BR-for-QE 5b21b8f] changes for question 11
Date: Mon Feb 2 12:26:39 2026 +0530
1 file changed, 1 insertion(+)
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git add README.md
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git cherry-pick --continue
error: no cherry-pick or revert in progress
fatal: cherry-pick failed
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin BR-for-QE
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 307 bytes | 307.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:dubeyjii1526/git-flow.git
  2882c2b..5b21b8f BR-for-QE -> BR-for-QE
ankush.dubey@simform.dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ 
```

Commits

BR-for-QE

Commits on Feb 2, 2026

changes for question 11
ankush dubey committed 2 minutes ago

Commits on Jan 30, 2026

Initial commit
dubeyjii1526 authored and ankush dubey committed 3 days ago

git-flow
ankush dubey committed 3 days ago

Squasd
ankush dubey committed 3 days ago

Initial setup
ankush dubey committed 3 days ago

13.Change commit message in 4th branch.

```
git sign commit

Commit contents options
  -a, --all          commit all changed files
  -i, --include      add specified files to index for commit
  --interactive     interactively add files
  -p, --patch        interactively add changes
  -o, --only         commit only specified files
  -n, --no-verify    bypass pre-commit and commit-msg hooks
  --dry-run          show what would be committed
  --short            show status concisely
  --branch           show branch information
  --ahead-behind    compute full ahead/behind values
  --porcelain        machine-readable output
  --long              show status in long format (default)
  -z, --null          terminate entries with NUL
  --amend             amend previous commit
  --no-post-rewrite   bypass post-rewrite hook
  -u, --untracked-files[<modes>]  show untracked files, optional modes: all, normal, no. (Default: all)
  --pathspec-from-file <file>       read pathspec from file
  --pathspec-file-nul      with --pathspec-from-file, pathspec elements are separated with NUL character

● ankush.dubey@simform-dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git commit --amend -m "changed message"
[BR-for-QE a87e2b2] changed message
Date: Mon Feb 2 12:26:39 2026 +0530
1 file changed, 1 insertion(+)
○ ankush.dubey@simform-dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push origin BR-for-QE
To github.com:dubeyjii1526/git-flow.git
 ! [rejected]      BR-for-QE -> BR-for-QE (non-fast-forward)
error: failed to push some refs to 'github.com:dubeyjii1526/git-flow.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push ---help' for details.
● ankush.dubey@simform-dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$ git push --force-with-lease origin BR-for-QE
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 301 bytes | 301.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:dubeyjii1526/git-flow.git
 + 5b21b8f...a87e2b2 BR-for-QE -> BR-for-QE (forced update)
○ ankush.dubey@simform-dom@sf-cpu-551:~/Desktop/git-flow/my-project/git-flow$
```

The screenshot shows the GitHub repository interface for the 'git-flow' repository. The 'Commits' tab is selected. A dropdown menu shows 'BR-for-QE'. The search bar contains 'Type ⌂ to search'. Filter buttons for 'All users' and 'All time' are visible. The commit history is as follows:

- Commits on Feb 2, 2026:
 - changed message** (commit a87e2b2) by ankush dubey committed 1 minute ago
- Commits on Jan 30, 2026:
 - Initial commit** (commit 2882c2b) by dubeyjii1526 authored and ankush dubey committed 3 days ago
 - git-flow** (commit d154f71) by ankush dubey committed 3 days ago
 - Squash** (commit c50ce18) by ankush dubey committed 3 days ago
 - Initial setup** (commit eb35f57) by ankush dubey committed 3 days ago

14.Add 3 commit to 4th branch and delete last commit.

```
● ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git reset --soft HEAD~1
● ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git push origin BR-for-QE
To github.com:dubeyjiii1526/git-flow.git
 ! [rejected]      BR-for-QE -> BR-for-QE (non-fast-forward)
error: failed to push some refs to 'github.com:dubeyjiii1526/git-flow.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
● ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$ git push origin BR-for-QE --force-with-lease
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:dubeyjiii1526/git-flow.git
 + 767cd19...3316a16 BR-for-QE -> BR-for-QE (forced update)
● ankush.dubey@simform-dom:~/Desktop/git-flow/my-project/git-flow$
```

The screenshot shows a GitHub repository interface. At the top, there's a command-line terminal window displaying the execution of Git commands to reset and force-push a branch. Below the terminal is a navigation bar with links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The main area is titled "Commits" and shows a list of commits for the "BR-for-QE" branch. The commits are grouped by date: February 2, 2026, and January 30, 2026. Each commit entry includes the author, commit message, timestamp, and a copy/paste icon.

Date	Commit Message	Author	Timestamp	Commit Hash
Feb 2, 2026	second commit	ankush dubey	6 minutes ago	3316a16
Feb 2, 2026	first commit	ankush dubey	7 minutes ago	e628bab
Feb 2, 2026	changed message	ankush dubey	10 minutes ago	a87e2b2
Jan 30, 2026	Initial commit	dubeyjiii1526	3 days ago	2882c2b
Jan 30, 2026	git-flow	ankush dubey	3 days ago	d154f71
Jan 30, 2026	Squadsd	ankush dubey	3 days ago	c50ce16
Jan 30, 2026	Initial setup	ankush dubey	3 days ago	eb39f57