GIT AND GITHUB ASSIGNMENT

Branching & Collaboration

* Create a new repository and initialize it with a README.md.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos \$ ls devops-local-repo/ jnana-git/ weekedd-devsecops-task/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos \$ mkdir git-github-assignment

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos \$ cd git-github-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment \$ ls

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment

\$ git clone git@github.com:jnanaprakash05/git-hands-on-assignment.git

Cloning into 'git-hands-on-assignment'...

remote: Enumerating objects: 3, done.

remote: Counting objects: 100% (3/3), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

Receiving objects: 100% (3/3), done.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment \$ ls git-hands-on-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment \$ cd git-hands-on-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)

```
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos
$ ls
devops-local-repo/ jnana-git/ weekedd-devsecops-task/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos
$ mkdir git-github-assignment

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos
$ cd git-github-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment
$ ls

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment
$ git clone git@github.com:jnanaprakash05/git-hands-on-assignment.git
Cloning into 'git-hands-on-assignment'...

remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

Receiving objects: 100% (3/3), done.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment
$ ls
 git-hands-on-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment
$ cd git-hands-on-assignment/

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment (main)
$ |
```

- * Create 3 branches and switching between branches:
 - * dev (for development)
 - * qa (for testing)
 - * features/login (for a new feature)

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch

* main

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch dev

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch

dev

* main

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch qa

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch feature/login

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch

dev

feature/login

* main

qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$

```
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch
= main

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch dev

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch
dev
= main

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch feature/login

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch
dev
feature/login
= main
qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
S git branch
dev
feature/login
= main
qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
```

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git branch dev feature/login * main qa Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git checkout dev Switched to branch 'dev' Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ git branch * dev feature/login main qa Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ git checkout qa Switched to branch 'qa' Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa) \$ git branch dev feature/login main * qa Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa) \$ git checkout feature/login Switched to branch 'feature/login'

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git branch dev * feature/login

main qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

Feature Development

- * Add a file login.py in features/login branch.
- * Add some Python code (e.g., simple login function).
- * Commit and push it to the remote repo.

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git checkout feature/login

Switched to branch 'feature/login'

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ touch login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ ls

README.md login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ vi login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git status

On branch feature/login

Untracked files:

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

login.py

nothing added to commit but untracked files present (use "git add" to track)

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git add login.py

warning: in the working copy of 'login.py', LF will be replaced by CRLF the next time Git touches it

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

 $\$ git commit -m "simple login function"

[feature/login a7ac875] simple login function

1 file changed, 10 insertions(+)

create mode 100644 login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git push

fatal: The current branch feature/login has no upstream branch.

To push the current branch and set the remote as upstream, use

git push --set-upstream origin feature/login

To have this happen automatically for branches without a tracking upstream, see 'push.autoSetupRemote' in 'git help config'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

```
$ git push --
--all
                                 --force-with-lease
                                                                                         --recurse-submodules= --
               --exec=
                                                       --no-...
                                                                       --prune
tags
                  --follow-tags
                                      --ipv4
                                                       --no-verify
                                                                          --push-option=
--atomic
                                                                                               --repo=
verbose
--delete
                 --force
                                  --ipv6
                                                   --porcelain
                                                                      --quiet
                                                                                       --set-upstream
                                                                                                            --verify
--dry-run
                  --force-if-includes --mirror
                                                         --progress
                                                                            --receive-pack=
                                                                                                 --signed
```

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git push --set-upstream origin feature/login

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 4 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 431 bytes | 431.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

remote:

remote: Create a pull request for 'feature/login' on GitHub by visiting:

remote: https://github.com/jnanaprakash05/git-hands-on-assignment/pull/new/feature/login

remote:

 $To\ github.com: jn an aprakash 05/git-hands-on-as\ signment.git$

* [new branch] feature/login -> feature/login

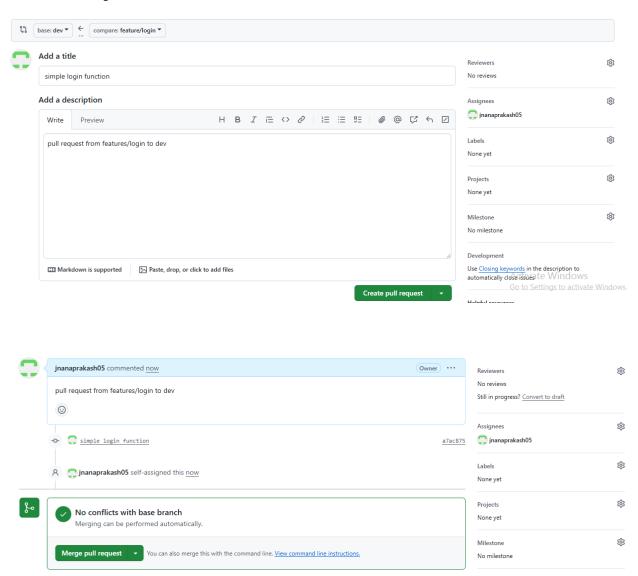
branch 'feature/login' set up to track 'origin/feature/login'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

```
u MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git checkout feature/login
Switched to branch 'feature/login'
          Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
$ touch login.py
   ksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
README.md login.py
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
 vi login.py
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
$ git status
On branch feature/login
Untracked files:
  (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
    csha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
$ git add login.py
 arning: in the working copy of 'login.py', LF will be replaced by CRLF the next time Git touches it
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) $ git commit -m "simple login function" [feature/login a7ac875] simple login function 1 file changed, 10 insertions(+) create mode 100644 login.py
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
```

```
gift push
iatal: The current branch feature/login has no upstream branch.
To push the current branch and set the remote as upstream, use
      git push --set-upstream origin feature/login
To have this happen automatically for branches without a tracking upstream, see 'push.autoSetupRemote' in 'git help config'.
  eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
git push --
-all --exec= --force-with-lease --no-... --nrune
                                         --exec=
--follow-tags
--force
                                                                                                                             --no-...
--no-verify
--porcelain
                                                                                                                                                                        --prune
--push-option=
--quiet
                                                                                                                                                                                                                  --recurse-submodules= --tags
--repo= --verbo
                                                                                                                                                                                                                   --repo=
--set-upstream
   -atomic
-delete
                                                                                   --ipv4
--ipv6
                                                                                                                                                                                                                                                              --verify
                                         --force-if-includes --mirror
                                                                                                                              --progress
                                                                                                                                                                        --receive-pack=
   eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) git push --set-upstream origin feature/login
5 git push --set-upstream origin feature/login
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 431 bytes | 431.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
  emote:
emote: Create a pull request for 'feature/login' on GitHub by visiting:
emote: https://github.com/jnanaprakash05/git-hands-on-assignment/pull/new/feature/login
  emote:
 emote.
o github.com:jnanaprakash05/git-hands-on-assignment.git
* [new branch] feature/login -> feature/login
oranch 'feature/login' set up to track 'origin/feature/login'.
    eksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)
```

- * Open a Pull Request (PR) from features/login \rightarrow dev.
- * Review and merge.



Merge Conflicts

- * In the dev branch, add a line to login.py.
- * In the features/login branch, add a different line in the same place of login.py.
- * Try merging features/login into dev.
- * Resolve the merge conflict, commit, and push.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) \$ git checkout dev Switched to branch 'dev' login.py Your branch is up to date with 'origin/dev'. Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ ls README.md login.py Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ vim login.py Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ git add * Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ git status On branch dev Your branch is up to date with 'origin/dev'. Changes to be committed: (use "git restore --staged <file>..." to unstage) modified: login.py Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ git commit -m "merge conflict" [dev a1e3d7d] merge conflict 1 file changed, 2 insertions(+) Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) \$ ls README.md login.py Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) \$ vim login.py Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login) \$ git add login.py Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git status

On branch feature/login

Your branch is up to date with 'origin/feature/login'.

Changes to be committed: (use "git restore --staged <file>..." to unstage) modified: login.py

```
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment
(feature/login)
$ git commit -m "modifing in feature/login"
[feature/login 147e886] modifing in feature/login
1 file changed, 1 insertion(+)
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment
(feature/login)
$ git merge dev
Auto-merging login.py
CONFLICT (content): Merge conflict in login.py
Automatic merge failed; fix conflicts and then commit the result.
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment
(feature/login|MERGING)
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment
(feature/login|MERGING)
$ cat login.py
#!/bin/bash
read -p 'Username: 'user
read -sp 'Password: 'pass
if (( $user == "admin" && $pass == "admin123" ))
echo -e "\nWelcome! You are Sucessfull login\n"
else
echo -e "\nUnsuccessfullogin\n"
>>>> dev
merge conflict
 witched to branch 'dev'
login.py
four branch is up to date with 'origin/dev'.
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
README.md login.py
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
```

eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) git commit -m "merge conflict"

ksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev:

on branch dev Your branch is up to date with 'origin/dev'.

ev a1e3d7d] merge conflict file changed, 2 insertions(+)

Changes to be committed:

(use "git restore --staged <file>..." to unstage)

modified: login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login|MERGING)

\$ vim login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login|MERGING)

\$ git status

On branch feature/login

Your branch is ahead of 'origin/feature/login' by 1 commit. (use "git push" to publish your local commits)

You have unmerged paths.

(fix conflicts and run "git commit")

(use "git merge --abort" to abort the merge)

Unmerged paths:

(use "git add <file>..." to mark resolution)

both modified: login.py

no changes added to commit (use "git add" and/or "git commit -a")

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login|MERGING)

\$ git add login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login|MERGING)

\$ git status -s M login.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login|MERGING)

\$ git commit -m "resolving merge conflict" [feature/login cd72400] resolving merge conflict

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git push

Enumerating objects: 9, done. Counting objects: 100% (9/9), done. Delta compression using up to 4 threads Compressing objects: 100% (7/7), done.

Writing objects: 100% (7/7), 743 bytes | 743.00 KiB/s, done. Total 7 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (3/3), completed with 1 local object.

To github.com:jnanaprakash05/git-hands-on-assignment.git

a7ac875..cd72400 feature/login -> feature/login

4.REBASING

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (feature/login)

\$ git checkout -b features/payments

Switched to a new branch 'features/payments'

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git branch

dev

feature/login

* features/payments

main

qa

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ echo "creating a file for rebase" >payment.sh

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ 1s

README.md login.py payment.sh

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git status

On branch features/payments

Untracked files:

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

payment.sh

nothing added to commit but untracked files present (use "git add" to track)

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git add payment.sh

warning: in the working copy of 'payment.sh', LF will be replaced by CRLF the next time Git touches it

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git commit -m "rebasing to dev"

[features/payments 60edc8e] rebasing to dev

1 file changed, 1 insertion(+) create mode 100644 payment.sh

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git push

fatal: The current branch features/payments has no upstream branch.

To push the current branch and set the remote as upstream, use

git push -- set-upstream origin features/payments

To have this happen automatically for branches without a tracking upstream, see 'push.autoSetupRemote' in 'git help config'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git push -- set-upstream origin features/payments

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done. Delta compression using up to 4 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 337 bytes | 337.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

remote:

remote: Create a pull request for 'features/payments' on GitHub by visiting:

remote: https://github.com/jnanaprakash05/git-hands-on-assignment/pull/new/features/payments

remote:

To github.com:jnanaprakash05/git-hands-on-assignment.git

* [new branch] features/payments -> features/payments

branch 'features/payments' set up to track 'origin/features/payments'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (features/payments)

\$ git checkout dev

Switched to branch 'dev'

Your branch is ahead of 'origin/dev' by 1 commit.

(use "git push" to publish your local commits)

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$ echo "updating readme.md while rebasing">>>README.md

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git status

On branch dev

Your branch is ahead of 'origin/dev' by 1 commit.

(use "git push" to publish your local commits)

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: README.md

no changes added to commit (use "git add" and/or "git commit -a")

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git commit -a -m "updating README.md"

warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it [dev cf09af4] updating README.md

1 file changed, 1 insertion(+)

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git push

Enumerating objects: 5, done. Counting objects: 100% (5/5), done. Delta compression using up to 4 threads Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 353 bytes | 353.00 KiB/s, done. Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0) To github.com;jnanaprakash05/git-hands-on-assignment.git 9922c1f..cf09af4 dev -> dev

//22c11..c10/a14 dcv -> dcv

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git status

On branch dev

Your branch is up to date with 'origin/dev'.

nothing to commit, working tree clean

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git rebase features/payments

Successfully rebased and updated refs/heads/dev.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev) \$

```
Decksha Pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ ceto "updating readme.md while rebasing">>README.md

Decksha Pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git status

Your branch is ahead of 'origin/dev' by 1 commit.

(use "git push" to publish your local commits)

Changes not staged for commit:

(use "git add *file>..." to udate what will be committed)

(use "git restore <file>..." to discard changes in working directory)

modified: README.md

no changes added to commit (use "git add" and/or "git commit -a")

Decksha Pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

git restore the pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

$ git push

Lever the pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

$ git push

Decksha Pallu@decksah-pallu MINGW64 -/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

$ git push

Compressing objects: 5, done.

Counting objects: 100% (3/3), done.

Writing objects: 100% (3/3), 33 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), 353 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), 353 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), 353 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), 353 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), 362 bytes | 353.00 KIB/s, done.

Writing objects: 100% (3/3), done.
```

Cherry-Picking

- * In dev, commit a change in deploy.sh.
- * Switch to qa branch and cherry-pick that commit.
- * Push the qa branch and raise a PR.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)

\$ git checkout dev

Switched to branch 'dev'

Your branch is ahead of 'origin/dev' by 5 commits.

(use "git push" to publish your local commits)

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git status

On branch dev

Your branch is ahead of 'origin/dev' by 5 commits.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git push

Enumerating objects: 5, done. Counting objects: 100% (5/5), done. Delta compression using up to 4 threads Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 475 bytes | 475.00 KiB/s, done. Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (1/1), done.

To github.com:jnanaprakash05/git-hands-on-assignment.git

cf09af4..b6c9205 dev -> dev

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ echo "creating a file for cheery-pick" >deploy.sh

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git add deploy.sh

warning: in the working copy of 'deploy.sh', LF will be replaced by CRLF the next time Git touches it

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git commit -m "working on cherry-pick"

[dev 8425e74] working on cherry-pick

1 file changed, 1 insertion(+) create mode 100644 deploy.sh

 $Deeks ha\ Pallu\ @deeks ah-pallu\ MINGW\ 64\ \ {\it \sim}/git-local-repos/git-github-assignment/git-hands-on-assignment\ (dev)$

\$

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)

\$ git push

Enumerating objects: 4, done. Counting objects: 100% (4/4), done. Delta compression using up to 4 threads Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 381 bytes | 381.00 KiB/s, done. Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0) To github.com; jnanaprakash05/git-hands-on-assignment.git

b6c9205..8425e74 dev -> dev

```
lu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git checkout dev
Switched to branch 'dev'
Your branch is ahead of 'origin/dev' by 5 commits.
(use "git push" to publish your local commits)
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment <mark>(dev)</mark>
$ git status
On branch dev
Your branch is ahead of 'origin/dev' by 5 commits.

(use "git push" to publish your local commits)
nothing to commit, working tree clean
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 475 bytes | 475.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), done.
To github.com:jnanaprakash05/git-hands-on-assignment.git
   cf09af4..b6c9205 dev -> dev
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ echo "creating a file for cheery-pick" >deploy.sh
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git add deploy.sh
 varning: in the working copy of 'deploy.sh', LF will be replaced by CRLF the next time Git touches it
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git commit -m "working on cherry-pick"
[dev 8425e74] working on cherry-pick
 1 file changed, 1 insertion(+)
create mode 100644 deploy.sh
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git log --oneliner
fatal: unrecognized argument: --oneliner
Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git log --oneline
8425e74 (HEAD -> dev, origin/dev) working on cherry-pick
b6c9205 Merge branch 'dev' of github.com:jnanaprakash05/git-hands-on-assignment into dev
f579cf1 updating README.md
cf09af4 updating README.md
60edc8e (origin/features/payments, features/payments) rebasing to dev
cd72400 (origin/feature/login, feature/login) resolving merge conflict
147e886 modifing in feature/login
ale3d7d merge conflict
9922c1f Merge pull request from jnanaprakash05/feature/login
a7ac875 simple login function
59bb196 (origin/qa, origin/main, origin/HEAD, qa, main) Initial commit
Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git checkout qa
Switched to branch 'qa'
Your branch is up to date with 'origin/qa'
```

 $Deeks ha\ Pallu\ @deeks\ ah-pallu\ \ MINGW\ 64\ \ \textit{~~/git-local-repos/git-github-assignment/git-hands-on-assignment}\ (qa)$

\$ git cherry-pick 8425e74

[qa 18824e4] working on cherry-pick Date: Fri Sep 5 20:37:19 2025 +0530

1 file changed, 1 insertion(+) create mode 100644 deploy.sh

```
sha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 381 bytes | 381.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:jnanaprakash05/git-hands-on-assignment.git
b6c9205..8425e74 dev -> dev
           Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
 git log --oneliner
atal: unrecognized argument: --oneliner
           (HEAD -> dev, origin/dev) working on cherry-pick
Merge branch 'dev' of github.com:jnanaprakash05/git-hands-on-assignment into dev
updating README.md
(origin/features/payments
           Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
  git log --oneline
25e74 (HEAD -> dev
                                              ents, features/payments) rebasing to dev
, feature/login) resolving merge conflict
            origin/feature/login, fe
modifing in feature/login
merge conflict
            Merge pull request from jnanaprakash05/feature/login
simple login function
(origin/qa, origin/main, origin/HEAD, qa, main) Initial commit
           Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
  git checkout qa
  git checkout qa
vitched to branch 'qa'
our branch is up to date with 'origin/qa'.
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa)
git cherry-pick 8425e74
qa 18824e4] working on cherry-pick
Date: Fri Sep 5 20:37:19 2025 +0530
1 file changed, 1 insertion(+)
create mode 100644 deploy.sh
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa)
README.md deploy.sh
    ksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa)
                             working on cherry-pick #2
            }⊸ Merged
                             jnanaprakash05 merged 1 commit into dev from qa □ now
                       jnanaprakash05 commented now
                                                                                                                                                           Owner · · ·
                        cherry-pick
                        0
                      -O- 💭 working on cherry-pick
                                                                                                                                                                    18824e4
                      A inanaprakash05 self-assigned this now
                     🕞 🦲 jnanaprakash05 merged commit 5ffa0c1 into 🕬 now
                                                                                                                                                                   Revert
            ہج
                        Pull request successfully merged and closed
                                                                                                                                                      Delete branch
                        You're all set — the ga branch can be safely deleted.
```

Hotfix Scenario

- * Create a branch hotfix/issue-123 from main.
- * Add a fix in app.py.
- * Commit and push.
- * Merge into both main and dev.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (qa)

\$ git checkout main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)

\$ git checkout -b hotfix/issue-123

Switched to a new branch 'hotfix/issue-123'

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)

\$ echo "working on hotflix" >app.py

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)

\$ git add app.py

warning: in the working copy of 'app.py', LF will be replaced by CRLF the next time Git touches it

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)

\$ git commit -m "commiting file for hotfix/issue-123"

[hotfix/issue-123 762b385] commiting file for hotfix/issue-123

1 file changed, 1 insertion(+)

create mode 100644 app.py

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)

\$ git push

fatal: The current branch hotfix/issue-123 has no upstream branch.

To push the current branch and set the remote as upstream, use

git push -- set-upstream origin hotfix/issue-123

To have this happen automatically for branches without a tracking upstream, see 'push.autoSetupRemote' in 'git help config'.

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)

\$ git push --set-upstream origin hotfix/issue-123

Enumerating objects: 4, done. Counting objects: 100% (4/4), done. Delta compression using up to 4 threads Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 308 bytes | 308.00 KiB/s, done. Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

remote:

remote: Create a pull request for 'hotfix/issue-123' on GitHub by visiting:

```
remote:
           https://github.com/jnanaprakash05/git-hands-on-assignment/pull/new/hotfix/issue-123
remote:
To github.com;jnanaprakash05/git-hands-on-assignment.git
* [new branch]
                 hotfix/issue-123 -> hotfix/issue-123
branch 'hotfix/issue-123' set up to track 'origin/hotfix/issue-123'.
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment
(hotfix/issue-123)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git merge hotfix/issue-123
Updating 59bb196..762b385
Fast-forward
app.py | 1 +
1 file changed, 1 insertion(+)
create mode 100644 app.py
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git checkout dev
Switched to branch 'dev'
Your branch is behind 'origin/dev' by 2 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)
Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
$ git merge hotfix/issue-123
Merge made by the 'ort' strategy.
app.py | 1 +
1 file changed, 1 insertion(+)
create mode 100644 app.py
Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
```

```
eksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (hotfix/issue-123)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
 eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git merge hotfix/issue-123
Updating 59bb196..762b385
 ast-forward
 app.py | 1 +
1 file changed, 1 insertion(+)
create mode 100644 app.py
  eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
  git checkout dev
 git checkout dev
witched to branch 'dev'
our branch is behind 'origin/dev' by 2 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)
     sha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
git merge hotfix/issue-123
lerge made by the 'ort' strategy.
app.py | 1 +
1 file changed, 1 insertion(+)
create mode 100644 app.py
  eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (dev)
```

Tagging & Releases

```
* Create a tag v1.0.0 on the main branch.
```

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git tag

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git tag -a V1.0.0

Deeksha Pallu@deeksah-pallu MINGW 64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git tag V1.0.0

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git tag V1.0.0lw

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git tag V1.0.0

V1.0.01w

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) \$ git show V1.0.0 tag V1.0.0

Tagger: jnanaprakash < jnanaprakash 05@gmail.com>

Date: Fri Sep 5 21:03:28 2025 +0530

tagging

commit 762b385a25316aa46e17bf55bd635f597ff04f65 (**HEAD** -> **main**, **tag:** V1.0.0lw, **tag:** V1.0.0, **origin/main**, **origin/hotfix/issue-123**, **origin/HEAD**, **hotfix/issue-123**)

Author: jnanaprakash < jnanaprakash 05@gmail.com>

Date: Fri Sep 5 20:51:11 2025 +0530

commiting file for hotfix/issue-123

diff --git a/app.py b/app.py new file mode 100644 index 0000000.832a83d --- /dev/null +++ b/app.py @@ -0,0 +1 @@ +working on hotflix

Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)

\$ git push origin --tags Enumerating objects: 1, done. Counting objects: 100% (1/1), done.

Writing objects: 100% (1/1), 159 bytes | 159.00 KiB/s, done. Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0) To github.com:jnanaprakash05/git-hands-on-assignment.git

* [new tag] V1.0.0 -> V1.0.0 * [new tag] V1.0.0lw -> V1.0.0lw

^{*} Push the tag to remote.

```
eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git tag
  eksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git tag -a V1.0.0
  eeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git tag
V1.0.0
Deeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main) $ git tag V1.0.0lw
 Beeksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git tag
V1.0.0
V1.0.0lw
  eksha Pallu@deeksah-pallu MINGW64 ~/git-local-repos/git-github-assignment/git-hands-on-assignment (main)
$ git show V1.0.0
tag V1.0.0
Tagger: jnanaprakash <jnanaprakash05@gmail.com>
Date: Fri Sep 5 21:03:28 2025 +0530
tagging
commit 762b385a25316aa46e17bf55bd633f597ff04f65 (HEAD -> main, tag: V1.0.0]m, tag: V1.0.0, origin/main, origin/hotfix/issue-123, origin/HEAD, hotfix/issue-123)
Author: jnanaprakash <jnanaprakash05@gmail.com>
Date: Fri Sep 5 20:51:11 2025 +0530
    committing file for hotfix/issue-123
diff —git a/app.py b/app.py
new file mode 100644
index 0000000..832a83d
 --- /dev/null
--- b/app.py
```