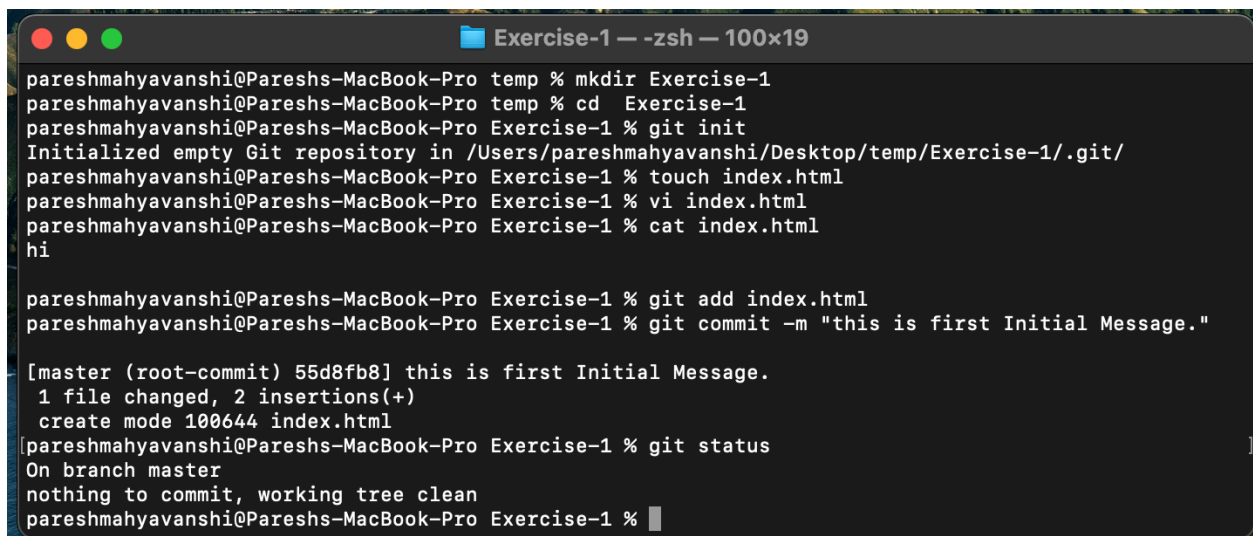


Git Assignment

Exercise 1: Create your first Commit.

Task:

- Initialize your Repository: git init project Exercise-1
% mkdir Exercise-1
% cd Exercise-1
% git init
- Create a file with name index.html
% touch index.html
- Write code in newly created file
% vi index.html
- Stage index.html
% git add index.html
- Commit with message 'Initial Message.'
% git commit -m "This is the first exercise"

A terminal window titled "Exercise-1 --zsh-- 100x19" showing the execution of Git commands. The user is in a directory named "Exercise-1" and performs the following steps: creating the directory, navigating to it, initializing a Git repository, creating an "index.html" file, editing it with "vi" (containing "hi"), adding it to the stage, and committing it with the message "this is first Initial Message." The terminal output shows the successful completion of these steps, including the commit hash 55d8fb8 and the status "nothing to commit, working tree clean".

```
pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-1
pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-1
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-1/.git/
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % touch index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % vi index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % cat index.html
hi

pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % git add index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % git commit -m "this is first Initial Message."

[master (root-commit) 55d8fb8] this is first Initial Message.
1 file changed, 2 insertions(+)
create mode 100644 index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 % git status
On branch master
nothing to commit, working tree clean
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-1 %
```

Exercise 2: Commit only one file.

Task:

- Initialize your Repository: git init Exercise-2
% mkdir Exercise-2
% cd Exercise-2
% git init
- Create a files with names index.html and about.html
% touch index.html about.html
- Add code in both files.
% vi index.html
% vi about.html

- Stage only one file.
% git add index.html
- Commit with message: 'File x added.'
% git commit -m "only index.html file added."

```
Exercise-2 — -zsh — 100x19
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-1/Exercise-2/.git
/
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % touch index.html about.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % ls
about.html      index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % git add index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % git commit -m "only index.html added"
[master (root-commit) c4550a1] only index.html added
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        about.html

nothing added to commit but untracked files present (use "git add" to track)
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 %
```

Exercise 3: Modify last commit.

Task:

- Initialize your Repository: git init project Exercise-3
% mkdir Exercise-3
% cd Exercise-3
% git init
- Create a file with name index.html
% touch index.html
- Write code in newly created file
% vi index.html
- Stage index.html
% git add index.html
- Commit with message 'adding index.html.'
% git commit -m "adding index.html file."
- Add new about.html file with some code.
% echo "hi,this is demo"> about.html
- Now modify message of previous commit as 'Adding index.html and about.html 'and add about.html file in previous commit.
% git add about.html
% git commit --amend -m "Adding index.html and about.html"

```
Exercise-3 -- zsh -- 116x35

pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % mkdir Exercise-3
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-2 % cd Exercise-3
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-1/Exercise-2/Exercise-3/.git/
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % touch index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % vi index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % cat index.html
Hi
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git add index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git commit -m "adding index.html file."
[master (root-commit) 27b0a53] adding index.html file.
1 file changed, 1 insertion(+)
 create mode 100644 index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % echo "hi,this is demo"> about.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git add about.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git commit --amend -m "Adding index.html and about.html"
[master f6f8ee1] Adding index.html and about.html
Date: Fri Feb 26 00:02:19 2021 -0800
2 files changed, 2 insertions(+)
 create mode 100644 about.html
 create mode 100644 index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git log
commit f6f8ee1625196f95df35debfc7db2048da68263 (HEAD -> master)
Author: Paresh Mahyavanshi <pmahyavanshi13@gmail.com>
Date: Fri Feb 26 00:02:19 2021 -0800

    Adding index.html and about.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 % git log -2
commit f6f8ee1625196f95df35debfc7db2048da68263 (HEAD -> master)
Author: Paresh Mahyavanshi <pmahyavanshi13@gmail.com>
Date: Fri Feb 26 00:02:19 2021 -0800

    Adding index.html and about.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-3 %
```

Exercise 4: Create git ignore file

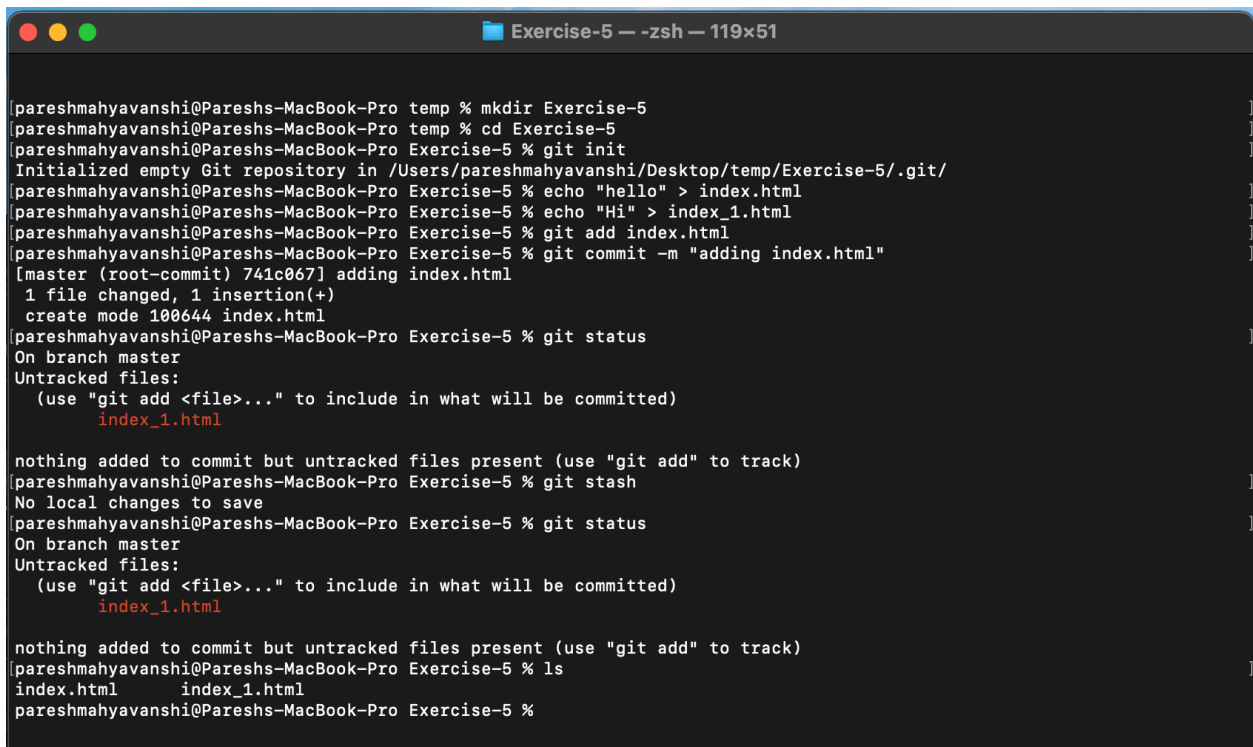
Task:

- Initialize your Repository: git init Exercise-4
 - % mkdir Exercise-4
 - % cd Exercise-4
 - % git init
- Create a git ignore file that will ignore
 - % touch .gitignore
 - % vi .gitignore
 - all files with 'exe' extension
 - % *.exe
 - all files with 'o' extension
 - % *.o
 - all files with 'jar' extension
 - % *.jar
 - the whole libraries directory
 - % /libraries_directory

Exercise 5: Save your work with stash.

Task:

- Initialize your Repository: `git init Exercise-5`
`% mkdir Exercise-5`
`% cd Exercise-5`
`% git init`
- Add some random files with code
`% echo "hello" > index.html`
`% echo "Hi" > index_1.html`
- Now use `git stash` command to save required files from above files.
`% git stash`
(For this exercise don't send repository just submit git commands and output of git stash list)



```
Exercise-5 — zsh — 119x51

[pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-5
[pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-5
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-5/.git/
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % echo "hello" > index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % echo "Hi" > index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git add index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git commit -m "adding index.html"
[master (root-commit) 741c067] adding index.html
1 file changed, 1 insertion(+)
create mode 100644 index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        index_1.html

nothing added to commit but untracked files present (use "git add" to track)
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git stash
No local changes to save
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        index_1.html

nothing added to commit but untracked files present (use "git add" to track)
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 % ls
index.html      index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-5 %
```

Exercise 6: Reset Previous Commit Keeping changes. (Soft Reset)

Task:

- Initialize your Repository: `git init Exercise-6.`
`% mkdir Exercise-6`
`% cd Exercise-6`
`% git init`
- Do some series of commits.
`% echo "hello" > index.html`
`% git add index.html`

- % git commit -m "adding index.html"
- % echo "Hi" > index_1.html
- % git add index_1.html
- % git commit -m "adding index_1.html"
- % echo "hello" > index_2.html
- % git add index_2.html
- % git commit -m "adding index_2.html"
- Now use git reset command to reset one of the commit and keep changes in staging area.
- % git reset --soft HEAD~1
- In answer also add output of git status command.
- % git status

```
Exercise-6 — -zsh — 112x39

[pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-6/.git/
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "hello" > index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master (root-commit) 826c52c] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi" > index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master 7879ed2] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi, hello" > index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index_2.html"
[master d2bd3f6] adding index_2.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD^
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   index_2.html

[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
7879ed2 (HEAD -> master) adding index.html
826c52c adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD~1
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
826c52c (HEAD -> master) adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % ]
```

Exercise 7: Reset Previous Commit (Hard Reset).

Task:

- Initialize your Repository: git init Exercise-7.
- % mkdir Exercise-7

- `% cd Exercise-7`
- `% git init`
- Do some series of commits.
 - `% echo "hello" > index.html`
 - `% git add index.html`
 - `% git commit -m "adding index.html"`
 - `% echo "hello" > index.html`
 - `% git add index.html`
 - `% git commit -m "adding index.html"`
 - `% echo "hello" > index.html`
 - `% git add index.html`
 - `% git commit -m "adding index.html"`
- Use git reset command to reset one of the commit without keeping changes.
 - `% git reset --hard HEAD~1`

```
Exercise-6 — -zsh — 112x39

[pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-6/.git/
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "hello" > index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master (root-commit) 826c52c] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi" > index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master 7879ed2] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi, hello" > index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index_2.html"
[master d2bd3f6] adding index_2.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD^
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   index_2.html

[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
7879ed2 (HEAD -> master) adding index.html
826c52c adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD~1
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
826c52c (HEAD -> master) adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % ]
```

Exercise 8: Merge branch (No Conflicts).

Task:

- Initialize your Repository: `git init Exercise-8`
- `% mkdir Exercise-8`

- % cd Exercise-8
- % git init
- Create index.html file add some code.
- % echo "hello" > index.html
- Make Commit.
- % git add.
- % git commit -m "add index.html file"
- Create new branch from master branch with name my-feature.
- % git checkout -b my-feature
- Add about-us.html file with code and commit changes in my-feature branch.
- % echo "hi" > about-us.html
- % git add.
- % git commit -m "add about-us.html file"
- Now checkout master branch.
- % git checkout master
- Merge my-feature branch into master.
- % git merge my-feature

```
Exercise-6 - -zsh - 112x39

[pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-6
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-6/.git/
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "hello" > index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master (root-commit) 826c52c] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi" > index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index.html"
[master 7879ed2] adding index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_1.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 %
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % echo "Hi, hello" > index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git add index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git commit -m "adding index_2.html"
[master d2bd3f6] adding index_2.html
 1 file changed, 1 insertion(+)
 create mode 100644 index_2.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD^
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   index_2.html

[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
7879ed2 (HEAD -> master) adding index.html
826c52c adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git reset --soft HEAD~1
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % git log --oneline
826c52c (HEAD -> master) adding index.html
[pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-6 % ]
```

Exercise 9: Merge branch (Conflicts).

Task:

- Initialize your Repository: `git init Exercise-9`
`% mkdir Exercise-9`
`% cd Exercise-9`
`% git init`
- Create index.html file add some code.
`% echo "hello" > index.html`
- Make Commit.
`% git add .`
`% git commit -m "add index.html file"`
- Create new branch from master branch with name my-feature.
`% git checkout -b my-featur`
- Add about-us.html file with code
`% echo "hi" > about-us.html`
- Make changes in index.html
`% vi index.html`
`% cat index.html`
- Commit changes in my-feature branch.
`% git add .`
`% git commit -m "add line"`
- Now checkout master branch.
`% git checkout master`
- Do some code changes in index.html
`% vi index.html`
`% cat index.html`
- Commit changes.
`% git add .`
`% git commit -m "add line"`
- Now merge my-feature branch into master.
`% git merge master`
- You will get conflicts for index.html file. Resolve conflict by selecting both changes for the same index.html file.
`% git mergetool`


```

Exercise-9 — -zsh — 103x64
pareshmahyavanshi@Pareshs-MacBook-Pro temp % mkdir Exercise-9
pareshmahyavanshi@Pareshs-MacBook-Pro temp % cd Exercise-9
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git init
Initialized empty Git repository in /Users/pareshmahyavanshi/Desktop/temp/Exercise-9/.git/
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % echo "hello" > index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git add .
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git commit -m "add index.html file"
[master (root-commit) b6adb2d] add index.html file
1 file changed, 1 insertion(+)
create mode 100644 index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git checkout -b my-featur
Switched to a new branch 'my-featur'
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % echo "hi" > about-us.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % vi index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % cat index.html
hello,This is Paresh
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git add .
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git commit -m "add one line in index.html"
[my-featur 2cec811] add one line in index.html
2 files changed, 2 insertions(+), 1 deletion(-)
create mode 100644 about-us.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git checkout master
Switched to branch 'master'
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % vi index.html
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % cat index.html
hello, This is paresh frm diff branch
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git add .
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git commit -m "add one line in master branch"
[master 19adf12] add one line in master branch
1 file changed, 1 insertion(+), 1 deletion(-)
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git merge master
Already up to date.
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git branch
* master
  my-featur
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git merge my-featur
Auto-merging index.html
CONFLICT (content): Merge conflict in index.html
Automatic merge failed; fix conflicts and then commit the result.
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git mergetool
Merging:
index.html

Normal merge conflict for 'index.html':
{local}: modified file
{remote}: modified file
The merge tool kdiff3 is not available as 'kdiff3'
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git config merge.tool vimdiff
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git config merge.conflictstyle diff3
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git mergetool kdiff3
No files need merging
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % git mergetool
Merging:
index.html

Normal merge conflict for 'index.html':
{local}: modified file
{remote}: modified file
4 files to edit
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 % cat index.html

hello, This is paresh frm diff branch
hello,This is Paresh
pareshmahyavanshi@Pareshs-MacBook-Pro Exercise-9 %

```