

Exercise 1. Create your first Commit.

Initialize your Repository: git init project Exercise-1

```
devops-scripts terraform_advanced terraform_network
• rutu@Rutu:~/src$ git branch
• rutu@Rutu:~/src$ git init projectexercise1
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rutu/src/projectexercise1/.git/
• rutu@Rutu:~/src$ ls
devops-scripts projectexercise1 terraform_advanced terraform_network
○ rutu@Rutu:~/src$
```

Create a file with name index.html

```
• rutu@Rutu:~/src/projectexercise1$ touch index.html
• rutu@Rutu:~/src/projectexercise1$ ls
index.html
```

Write code in newly created file

```
5 index.html projectexercise1/index.html/ html/ body/ main/ section/ h2
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <meta charset="UTF-8">
5  |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  |   <title>My Simple Webpage</title>
7  </head>
8  <body>
9  |   <header>
10 |     <h1>Welcome to My Simple Webpage</h1>
11 |   </header>
12 |   <main>
13 |     <section>
14 |       <p>This is my first simple webpage. HTML is fun to learn and easy to use!</p>
15 |     </section>
16 |     <section>
17 |       <h2>My Favorite Fruits</h2>
18 |       <ul>
19 |         <li>Apple</li>
20 |         <li>Banana</li>
21 |         <li>Cherry</li>
```

Stage index.html

```
index.html
● rutu@Rutu:~/src/projectexercise1$ git add index.html
```

Commit with message 'Initial Message.'

```
● rutu@Rutu:~/src/projectexercise1$ git commit -m "Created a basic index file"
[master (root-commit) 75e77dd] Created a basic index file
1 file changed, 29 insertions(+)
create mode 100644 index.html
```

Exercise 2. Commit only one file

Initialize your Repository

```
● rutu@Rutu:~/src$ git init project-exercise2
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rutu/src/project-exercise2/.git/
● rutu@Rutu:~/src$ ls
devops-scripts  project-exercise1  project-exercise2  terraform_advanced  terraform_network
```

Create files with names index.html and about.html

```
● rutu@Rutu:~/src/project-exercise2$ touch index.html about.html
● rutu@Rutu:~/src/project-exercise2$ ls
about.html  index.html
```

Add code in both files.

Stage only one file.

Commit with message: 'File x added.'

```
● rutu@Rutu:~/src/project-exercise2$ git add index.html
● rutu@Rutu:~/src/project-exercise2$ git commit -m "new file added"
[master (root-commit) 7f2feab] new file added
1 file changed, 76 insertions(+)
create mode 100644 index.html
```

Exercise 3. Merge branch (No Conflicts).

Initialize your Repository

```

● rutu@Rutu:~/src$ git init project-exercise3
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rutu/src/project-exercise3/.git/
● rutu@Rutu:~/src$ ls
devops-scripts  project-exercise1  project-exercise2  project-exercise3  terraform_advanced  terraform_network

```

Create index.html file add some code.

```

● rutu@Rutu:~/src$ cd project-exercise3
● rutu@Rutu:~/src/project-exercise3$ touch index.html
● rutu@Rutu:~/src/project-exercise3$ ls
index.html
○ rutu@Rutu:~/src/project-exercise3$ 

```

Make Commit.

```

● rutu@Rutu:~/src/project-exercise3$ git add index.html
● rutu@Rutu:~/src/project-exercise3$ git commit -m "new file created"
[master (root-commit) 9261e2c] new file created
1 file changed, 76 insertions(+)
create mode 100644 index.html

```

Create new branch from master branch with name my-feature.

```

● rutu@Rutu:~/src/project-exercise3$ git branch my-feature
● rutu@Rutu:~/src/project-exercise3$ git branch
* master
  my-feature
● rutu@Rutu:~/src/project-exercise3$ git checkout my-feature
Switched to branch 'my-feature'
○ rutu@Rutu:~/src/project-exercise3$ 

```

Add about-us.html file with code and commit changes in myfeature branch.

```

● rutu@Rutu:~/src/project-exercise3$ touch about.html
● rutu@Rutu:~/src/project-exercise3$ git add about.html
● rutu@Rutu:~/src/project-exercise3$ git commit -m "added new file which has details about the business"
[my-feature cb909d1] added new file which has details about the business
1 file changed, 74 insertions(+)
create mode 100644 about.html

```

Now checkout master branch.

```

● rutu@Rutu:~/src/project-exercise3$ git checkout master
Switched to branch 'master'

```

Merge my-feature branch into master.

```
• rutu@Rutu:~/src/project-exercise3$ git merge my-feature
Updating 9261e2c..cb909d1
Fast-forward
 about.html | 74 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 1 file changed, 74 insertions(+)
 create mode 100644 about.html
rutu@Rutu:~/src/project-exercise3$
```

Exercise 4. Merge branch (Conflicts).

Initialize your Repository Create index.html file add some code.

Make Commit.

```
• rutu@Rutu:~/src$ git init project-exercise4
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rutu/src/project-exercise4/.git/
• rutu@Rutu:~/src$ cd project-exercise4
• rutu@Rutu:~/src/project-exercise4$ touch index.html
• rutu@Rutu:~/src/project-exercise4$ git add index.html
• rutu@Rutu:~/src/project-exercise4$ git commit -m "file updated"
[master (root-commit) 0fe372b] file updated
 1 file changed, 76 insertions(+)
 create mode 100644 index.html
```

Create new branch from master branch with name my-feature.

Add about-us.html file with code Make changes in index.html Commit changes in my-feature branch.

Now checkout master branch.

```

● rutu@Rutu:~/src/project-exercise4$ git branch my-feature
● rutu@Rutu:~/src/project-exercise4$ git branch
* master
  my-feature
● rutu@Rutu:~/src/project-exercise4$ git checkout my-feature
Switched to branch 'my-feature'
● rutu@Rutu:~/src/project-exercise4$ touch about.html
● rutu@Rutu:~/src/project-exercise4$ git add index.html
● rutu@Rutu:~/src/project-exercise4$ git commit -m "updated tea flavors"
[my-feature c4fc290] updated tea flavors
 1 file changed, 3 insertions(+)
● rutu@Rutu:~/src/project-exercise4$ git checkout master
Switched to branch 'master'

```

Do some code changes in index.html Commit changes.

Now merge my-feature branch into master.

You will get conflicts for index.html file.

Resolve conflict by selecting both changes for the same index.html file.

```

● rutu@Rutu:~/src/project-exercise4$ git merge my-feature
Auto-merging index.html
Merge made by the 'ort' strategy.
  index.html | 3 +++
  1 file changed, 3 insertions(+)
○ rutu@Rutu:~/src/project-exercise4$ 

```