

VCS Assignment

Exercise1.

Initialize your Repository: git init project Exercise-1

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ ls
Exercise-1/

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ |
```

Create a file with name index.html

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ ls
Exercise-1/ index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ cat index.html
<html>
<header>
</header>
<body>
<p>This is a Sample HTML file</p>
</body>
</html>

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ |
```

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-1 (master)
$ git status
On branch master

No commits yet

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

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

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-1 (master)
$ |
```

Commit with message 'Initial Message'

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-1 (master)
$ git add index.html
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time Git touches it

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-1 (master)
$ ls
index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-1 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   index.html
```

Exercise 2. Commit only one file.

Initialize your Repository

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ git init Exercise-2
Initialized empty Git repository in D:/ConsultAdd_Assignments/VCS_Assignment/Exercise-2/.git/

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
```

Create a files with names index.html and about.html

Stage only one file.

```
No commits yet

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

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

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$ git add about.html
warning: in the working copy of 'about.html', LF will be replaced by CRLF the next time Git touches it

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   about.html

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

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$
```

Commit with message: 'File x added.'

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$ git commit -m "File x added"
[master (root-commit) c9f63de] File x added
1 file changed, 5 insertions(+)
create mode 100644 about.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        index.html

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

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-2 (master)
$
```

Exercise 3:

Initialize your Repository

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ git init Exercise-3
Initialized empty Git repository in D:/ConsultAdd_Assignments/VCS_Assignment/Exercise-3/

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ ls
Exercise-1/  Exercise-2/  Exercise-3/  index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$
```

Make Commit.

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ ls
index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git commit -m "Master branch commit"
[master (root-commit) 51696c2] Master branch commit
 1 file changed, 1 insertion(+)
 create mode 100644 index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ |
```

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

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git branch
* master
  my-feature

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git checkout my-feature
Switched to branch 'my-feature'

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ |
```

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

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ ls
about-us.html  index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ git add about-us.html
warning: in the working copy of 'about-us.html', LF will be replaced by CRLF the next time Git touches it

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ git status
On branch my-feature

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ |
```

```

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ git commit -m "Added about-us.html page"
[my-feature 0ebb7ae] Added about-us.html page
1 file changed, 22 insertions(+)
create mode 100644 about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$

```

Now checkout master branch ...

```

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ git commit -m "Added about-us.html page"
[my-feature 0ebb7ae] Added about-us.html page
1 file changed, 22 insertions(+)
create mode 100644 about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (my-feature)
$ git checkout master
Switched to branch 'master'

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git branch
* master
  my-feature

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$

```

Merge my-feature branch into master ...

```

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ git merge my-feature
Updating 51696c2..0ebb7ae
Fast-forward
 about-us.html | 22 +++++++++++++++++++++
1 file changed, 22 insertions(+)
create mode 100644 about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$ ls
about-us.html  index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-3 (master)
$

```

Exercise-4

Initialize your Repository

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ ls
Exercise-1/ Exercise-2/ Exercise-3/ index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$ git init Exercise-4
Initialized empty Git repository in D:/ConsultAdd_Assignments/VCS_Assignment/Exercise-4/.git/

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment
$
```

Create index.html file add some code. Make Commit.

```
$ git add .
warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time Git touches it

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git commit -m "Master Branch commit"
[master (root-commit) ceb8282] Master Branch commit
1 file changed, 1 insertion(+)
create mode 100644 index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$
```

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

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git branch my-feature

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git checkout my-feature
Switched to branch 'my-feature'

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (my-feature)
$
```

Add about-us.html file with code Make changes in index.html

Commit changes in my-feature branch.

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (my-feature)
$ git status
On branch my-feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   about-us.html
    modified:   index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (my-feature)
$ git commit -m "Feature branch commit"
[my-feature 5aec065] Feature branch commit
 2 files changed, 3 insertions(+), 1 deletion(-)
 create mode 100644 about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (my-feature)
$ |
```

Do some code changes in index.html Commit changes.

```
$ git status
On branch master
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:   index.html

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

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git add index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git commit -m "Master Branch Commit"
[master ebc1c60] Master Branch Commit
 1 file changed, 1 insertion(+)

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ |
```

```
1 file changed, 1 insertion(+)

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git merge my-feature
Auto-merging index.html
CONFLICT (content): Merge conflict in index.html
Automatic merge failed; fix conflicts and then commit the result.

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master|MERGING)
$ |
```

You will get conflicts for index.html file. Resolve conflict by selecting both changes for the same index.html file

```
MINGW64:/d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4
GNU nano 8.1 index.html
<<<<<< HEAD
Added changes in Master Branch
Added changes here again!
=====
Master Branch
Added changes from the Feature branch
>>>>>> my-feature
```

```
MINGW64:/d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4
GNU nano 8.1
Added changes in Master Branch
Added changes here again!
Master Branch
Added changes from the Feature branch
```


You will get conflicts for index.html file. Resolve conflict by selecting both changes for the same index.html file ...

```
User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master|MERGING)
$ git status
On branch master
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  new file:   about-us.html
  modified:   index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master|MERGING)
$ git commit -m "Resolved merge conflict"
[master 6b06543] Resolved merge conflict

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ git status
On branch master
nothing to commit, working tree clean

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ ls
about-us.html  index.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ nano about-us.html

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$ cat index.html
Added changes in Master Branch
Added changes here again!
Master Branch
Added changes from the Feature branch

User@Nikhil MINGW64 /d/ConsultAdd_Assignments/VCS_Assignment/Exercise-4 (master)
$
```