GIT Assignment 1

1. Create a New Repository

Created- https://github.com/i-yashvi/NucleusTeq Training

```
BIIT@DESKTOP-MT1T055 MINGW64 ~ (master)

$ cd Desktop

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop (master)

$ git clone https://github.com/i-yashvi/NucleusTeq_Training.git
Cloning into 'NucleusTeq_Training'...
warning: You appear to have cloned an empty repository.

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop (master)

$ cd NucleusTeq_Training

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)

$ []
```

2. Create a New File

Created- https://github.com/i-yashvi/NucleusTeq Training/blob/main/index.html

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeg Training (main)
$ touch index.html
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git add index.html
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git commit -m "File Created"
 [main (root-commit) 8ae49dc] File Created
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 index.html
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git push origin main
 Enumerating objects: 3, done.
 Counting objects: 100% (3/3), done.
 Writing objects: 100% (3/3), 218 bytes | 109.00 KiB/s, done.
 Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
 To https://github.com/i-yashvi/NucleusTeq_Training.git
  * [new branch]
                     main -> main
```

3. Create a Branch

Created- https://github.com/i-yashvi/NucleusTeq Training/branches

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)

$ git checkout -b new_branch
Switched to a new branch 'new_branch'

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ git branch
main
* new_branch
```

4. Make Changes in the New Branch

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ echo "<h1>HELLO</h1>" > index.html

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ git add index.html

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

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ git commit -m "Changes made in new branch"

[new_branch 98b3529] Changes made in new branch

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

5. Create Another Branch (Optional)

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ git checkout -b another_branch
Switched to a new branch 'another_branch'

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (another_branch)

$ git branch
* another_branch
main
new_branch
```

6. Merge Branches

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (another_branch)

$ git checkout new_branch
Switched to branch 'new_branch'

BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (new_branch)

$ git merge another_branch
Updating 98b3529..274544a
Fast-forward
index.html | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
```

7. Pull Changes from Remote

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)

$ git pull origin main
From https://github.com/i-yashvi/NucleusTeq_Training

* branch main -> FETCH_HEAD

Already up to date.
```

8. View Git Log and History

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)

$ git log --oneline --graph --all

* 274544a (origin/new_branch, new_branch, another_branch) Changes made in another branch

* 98b3529 Changes made in new branch

* 8ae49dc (HEAD -> main, origin/main) File Created
```

9. Git Status and Staging

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)

$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

10. Revert and Reset

```
BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git log --oneline
 95549c8 (HEAD -> main) Final changes
 8ae49dc (origin/main) File Created
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git revert 95549c8
 [main 33e503c] Revert "Final changes-Used revert"
  1 file changed, 1 deletion(-)
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git log --oneline
 33e503c (HEAD -> main) Revert "Final changes-Used revert"
 95549c8 Final changes
 8ae49dc (origin/main) File Created
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq Training (main)
$ git reset --hard HEAD~1
 HEAD is now at 95549c8 Final changes
 BIIT@DESKTOP-MT1T055 MINGW64 ~/Desktop/NucleusTeq_Training (main)
$ git log --oneline
 95549c8 (HEAD -> main) Final changes
 8ae49dc (origin/main) File Created
```