

## Project - 4

### Git Project:

Following are the series of steps and screenshots for the executed commands

#### I. Task 1: Create a repository in github

##### a. Git init

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo (master)
$ git init
Reinitialized existing Git repository in C:/myrepo/.git/
```

##### b. Both config commands

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo (master)
$ git config --global user.email shivapd1996@gmail.com

shiva@D$ git config --global user.name ShivaBasava
```

#### II. Task 2: Open git bash and clone contents from remote repository

##### a. Clone, used to get the remote repository copy to local repository

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo (master)
$ git clone https://github.com/ShivaBasava/demo-letsup.git
Cloning into 'demo-letsup'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.
```

##### b. show the folder in local repository - **demo-letsup** is the repository

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo (master)
$ ls
demo-letsup/  green/  red/  test1.txt
```

#### III. Task 3: Create a file in the local space and push it to the remote repository

##### a. Add command

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git add .

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   test1.txt
```

**b. Commit command**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git commit -m "Added test1.txt" test1.txt
[main bc723a3] Added test1.txt
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 test1.txt

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

**c. Displaying push successful**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git push -u origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 284 bytes | 284.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ShivaBasava/demo-letsup.git
  1107b46..bc723a3  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```

**d. Displaying the file in remote repository**

ShivaBasava Added test1.txt			bc723a3 1 hour ago	🕒 2 commits
📄 README.md	Initial commit			14 days ago
📄 test1.txt	Added test1.txt			1 hour ago

**IV. Task 4: Branching and merging**

Executing the various git branch commands and their screenshots

**a. git branch**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch
* main
```

**b. git branch new\_branch**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch new_branch

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch
* main
  new_branch
```

c. git checkout new\_branch

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git checkout new_branch
Switched to branch 'new_branch'

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch)
$
```

d. git merge new\_branch

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git merge new_branch
Already up to date.
```

e. git branch -d new\_branch

After adding a text file, we tried to delete the branch 'new\_branch', below screenshot shows the scenario.

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch -d new_branch
error: The branch 'new_branch' is not fully merged.
If you are sure you want to delete it, run 'git branch -D new_branch'.

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git merge new_branch
Updating bc723a3..2b062cc
Fast-forward
 sample.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 sample.txt

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch -d new_branch
Deleted branch new_branch (was 2b062cc).
```

f. git checkout -b new\_branch2

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git checkout -b new_branch2
Switched to a new branch 'new_branch2'

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch2)
$
```



**g. git branch -D new\_branch2**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch
* main
  new_branch2

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git checkout new_branch2
Switched to branch 'new_branch2'

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch2)
$ touch sample.txt

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch2)
$ git add .

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch2)
$ git commit -m "added sample" sample.txt
[new_branch2 2971eb9] added sample
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 sample.txt

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (new_branch2)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git branch -D new_branch2
Deleted branch new_branch2 (was 2971eb9).
```

**h. git log**

```
shiva@DESKTOP-EKNHCTS MINGW64 /c/myrepo/demo-letsup (main)
$ git log
commit 2b062cc18f7eef3ac7b0c52aad07e38374de3b64 (HEAD -> main)
Author: ShivaBasava <shivapd1996@gmail.com>
Date: Sun Jan 31 20:37:33 2021 +0530

    sample.txt

commit bc723a3b85ab7e0308d47545873b7445e2b157ae (origin/main, origin/HEAD)
Author: ShivaBasava <shivapd1996@gmail.com>
Date: Sun Jan 31 19:25:37 2021 +0530

    Added test1.txt
```