## **GIT ASSIGNMENT-1**

## Create a New Repository

- ->Git init gitassignment1
- ->cd gitassignment1

```
MINGW64:/d/des/gitassignment1

bhanu@Beaver MINGW64 /d/des
$ git init gitassignment1
Initialized empty Git repository in D:/des/gitassignment1/.git/
bhanu@Beaver MINGW64 /d/des
$ cd gitassignment1/

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master

No commits yet
nothing to commit (create/copy files and use "git add" to track)
```

#### 2. Create a New File

- -> echo "hello,this is my first git assignment." > file.txt
- ->git status
- ->git add file.txt
- ->git commit -m "Added first assignment"

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ echo "hello,this is my first git assignment." > file.txt

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master

No commits yet

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

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

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git add file.txt
warning: in the working copy of 'file.txt', LF will be replaced by CRLF the next time Git touches it

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git commit -m "addad first assignment1 (master)

[master (root-commit) 64a23cd] addad first assignment
1 file changed, 1 insertion(+)
create mode 100644 file.txt
```

#### 3. Create a Branch

- ->git branch secondary
- ->git switch secondary
- ->git branch

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)

$ git branch

* master

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)

$ git branch secondary

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)

$ git branch

* master

* secondary

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)

$ git switch secondary

Switched to branch 'secondary'

bhanu@Beaver MINGW64 /d/des/gitassignment1 (secondary)

$ git branch

master

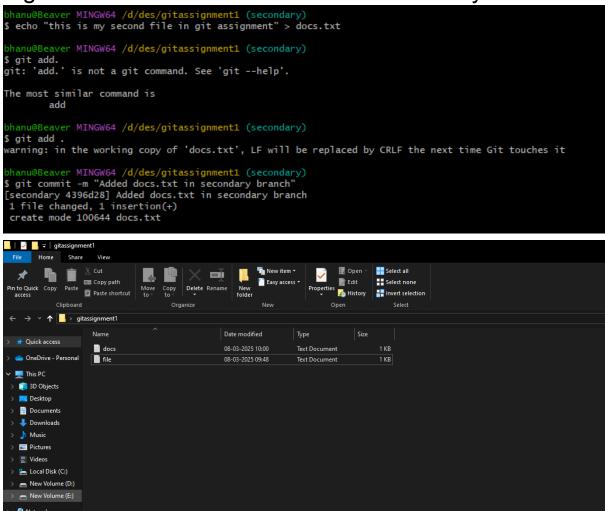
* secondary
```

#### 4. Make Changes in the New Branch

->\$ echo "this is my second file in git assignment" > docs.txt

->git add .

->git commit -m "Added docs.txt in secondary branch"



#### Create Another Branch (Optional)

- ->git checkout -b third
- ->git branch

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (secondary)

$ git checkout -b third

Switched to a new branch 'third'

bhanu@Beaver MINGW64 /d/des/gitassignment1 (third)

$ git branch
   master
   secondary

* third
```

#### 6. Merge Branches

- ->git checkout master
- ->git branch
- ->git merge secondary

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (third)
$ git checkout master
Switched to branch 'master'

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git branch
* master
    secondary
    third

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git merge secondary
Updating 64a23cd..4396d28
Fast-forward
    docs.txt | 1 +
    1 file changed, 1 insertion(+)
    create mode 100644 docs.txt
```

## 7. Pull Changes from Remote

- ->git remote -v
- ->git remote add origin

https://github.com/bhanu-100/gitassignment1.git

- ->git branch -r
- ->git push -u origin master
- ->git pull origin master

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git remote -v
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git remote add origin https://github.com/bhanu-100/gitassignment1.git
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git remote-v
git: 'remote-v' is not a git command. See 'git --help'.
The most similar command is
        remote-fd
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git remote -v
origin https://github.com/bhanu-100/gitassignment1.git (fetch)
origin https://github.com/bhanu-100/gitassignment1.git (push)
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git branch -r
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git push -u origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 554 bytes | 277.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/bhanu-100/gitassignment1.git
* [new branch] master -> master
branch 'master' set up to track 'origin/master'.
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git pull origin master
From https://github.com/bhanu-100/gitassignment1
* branch
                                 -> FETCH_HEAD
                      master
Already up to date.
```

# View Git Log and History ->git log

->git log --online --graph --all

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log
commit 4396d28de21a626bd5f89c0772082302d8884a69 (HEAD -> master, origin/master, third, secondary)
Author: bhanu=100 <br/>
bhanusinghx100@gmail.com>
Date: Sat Mar 8 10:01:35 2025 +0530

Added docs.txt in secondary branch

commit 64a23cdce911eb3fda239a28b35c59ad68b8efdb
Author: bhanu=100 <br/>
bhanusinghx100@gmail.com>
Date: Sat Mar 8 09:49:44 2025 +0530

addad first assignment

bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log --oneline --graph --all
* 4396d28 (HEAD -> master, origin/master, third, secondary) Added docs.txt in secondary branch
* 64a23cd addad first assignment
```

# Git Status and Staging

- ->git status
- ->echo "this is third file" > third.txt
- ->git status
- ->git add.
- ->git status
- ->git commit -m "Added third file"
- ->git push -u origin master
- ->git status

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.
nothing to commit, working tree clean
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ echo "this is third file" > third.txt
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.
Untracked files:
  (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git add .
warning: in the working copy of 'third.txt', LF will be replaced by CRLF the next time
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file: third.txt
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git commit -m "Added third file"
[master c47d9fd] Added third file
1 file changed, 1 insertion(+)
create mode 100644 third.txt
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)
nothing to commit, working tree clean
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git push -u origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 324 bytes | 324.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/bhanu-100/gitassignment1.git
   4396d28..c47d9fd master -> master
branch 'master' set up to track 'origin/master'.
```

#### 10. Revert and Reset

- ->git log --online --graph --all
- ->git revert 4396d28
- ->git commit -m "wrong commit"
- ->git reset --soft HEAD~1

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log --oneline --graph --all

* c47d9fd (HEAD -> master, origin/master) Added third file

* 4396d28 (third, secondary) Added docs.txt in secondary branch
* 64a23cd addad first assignment
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git revert 4396d28
[master 3376b90] Revert "Added docs.txt in secondary branch"
 1 file changed, 1 deletion(-)
 delete mode 100644 docs.txt
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)
nothing to commit, working tree clean
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git reset --soft HEAD~1
```

```
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git commit -m "wrong commit"
[master cd625aa] wrong commit
1 file changed, 1 deletion(-)
delete mode 100644 docs.txt
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ gt log --online
bash: gt: command not found
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log --online
fatal: unrecognized argument: --online
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log --oneline --graph --all
 cd625aa (HEAD -> master) wrong commit
* c47d9fd (origin/master) Added third file
* 4396d28 (third, secondary) Added docs.txt in secondary branch
* 64a23cd addad first assignment
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git reset --soft HEAD~1
bhanu@Beaver MINGW64 /d/des/gitassignment1 (master)
$ git log --oneline --graph --all
c47d9fd (HEAD -> master, origin/master) Added third file
4396d28 (third, secondary) Added docs.txt in secondary branch
 64a23cd addad first assignment
```

