

GIT

Operations

Krishnan

1. Basic Remote to Local Operation

Before executing the below commands visit github.com then create a new public repository, then copy the https URL. The copied URL will be used for cloning your repository to a local directory.

```
PS D:\IN_Progrss\GIT\GIT_CLASS> git clone https://github.com/dreadwing148/bandm.git
```

Cloning into 'bandm'...

warning: You appear to have cloned an empty repository.

```
PS D:\IN_Progrss\GIT\GIT_CLASS> cd bandm
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> echo "<h1>Hello everyone, Let's see how to create branches</h1>" >index.html
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git add index.html
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git commit -m "repo cloned and index.html file was created with a h1 tag"
```

[main (root-commit) 368cc9a] repo cloned and index.html file was created with a h1 tag

1 file changed, 0 insertions(+), 0 deletions(-)

create mode 100644 index.html

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git push
```

Enumerating objects: 3, done.

Counting objects: 100% (3/3), done.

Delta compression using up to 20 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 336 bytes | 112.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/dreadwing148/bandm.git

* [new branch] main -> main

PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git pull

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

Unpacking objects: 100% (3/3), 1.09 KiB | 111.00 KiB/s, done.

From https://github.com/dreadwing148/bandm

368cc9a..6972ba4 main -> origin/main

Updating 368cc9a..6972ba4

Fast-forward

index.html | Bin 120 -> 328 bytes

1 file changed, 0 insertions(+), 0 deletions(-)

PS D:\IN_Progrss\GIT\GIT_CLASS\bandm>

2. Branching and Merging

In order to perform branching and merging operations we need an existing repository which has files inside.

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git clone https://github.com/dreadwing148/bandm.git
```

Cloning into 'bandm'...

remote: Enumerating objects: 9, done.

remote: Counting objects: 100% (9/9), done.

remote: Compressing objects: 100% (5/5), done.

remote: Total 9 (delta 1), reused 7 (delta 1), pack-reused 0 (from 0)

Receiving objects: 100% (9/9), done.

Resolving deltas: 100% (1/1), done.

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git branch
```

```
* main
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git branch newb
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git branch
```

```
* main
```

```
newb
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git checkout newb
```

Switched to branch 'newb'

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git branch
```

```
main
```

```
* newb
```

(----- add files with new content or make changes in the existing file -----)

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git add index.html
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git commit -m "new line added to index.html after creating a branch 'newb'"
```

```
[newb bcad441] new line added to index.html after creating a branch 'newb'
```

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

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git checkout main
```

```
Switched to branch 'main'
```

```
Your branch is up to date with 'origin/main'.
```

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git merge newb
```

```
Updating 6972ba4..bcad441
```

```
Fast-forward
```

```
index.html | 1 +
```

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

```
PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git push
```

```
Enumerating objects: 5, done.
```

```
Counting objects: 100% (5/5), done.
```

```
Delta compression using up to 20 threads
```

```
Compressing objects: 100% (2/2), done.
```

```
Writing objects: 100% (3/3), 342 bytes | 171.00 KiB/s, done.
```

```
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
```

remote: Resolving deltas: 100% (1/1), completed with 1 local object.

To https://github.com/dreadwing148/bandm.git

6972ba4..bcad441 main -> main

PS D:\IN_Progrss\GIT\GIT_CLASS\bandm> git branch -d newb

Deleted branch newb (was bcad441).

PS D:\IN_Progrss\GIT\GIT_CLASS\bandm>

