

Demonstrate working with Gitshell commands

Procedure:

1. Git init:

To start using git, navigate to the directory where your project is located and run

```
D:\Devops>git init
Initialized empty Git repository in D:/Devops/.git/
```

2. Adding files to staging area:

You can add your files to the staging area to prepare them for a commit using the 'git add' command for example to add a file called 'myfile.txt'

```
D:\Devops>git init
Initialized empty Git repository in D:/Devops/.git/

D:\Devops>git add myfile.txt
```

3. Committing changes:

Once you have added files to the staging area you can commit them to repository with a commit message using 'git commit' command

```
D:\Devops>git commit -m "your commit changes"
[master (root-commit) e747d12] your commit changes
1 file changed, 1 insertion(+)
create mode 100644 myfile.txt
```

4. Checking Status:

To see the status of your repository and which files have been modified, added or deleted use 'git status'

```
D:\Devops>git status
On branch master
nothing to commit, working tree clean
```

5. Viewing commit history:

You can view the commit history of your repository using 'git log'

```
e747d1241f9e33ae983822c7c589ab84faef061c (HEAD -> master)
Author: Narendr <narendramurukurthi@gmail.com>
Date: Sun Dec 3 19:26:28 2023 +053
```

6.creating and switching Branches:

To create a new branch and switch to it use 'git checkout -b'

```
D:\Devops>git checkout -b mynewbranch  
Switched to a new branch 'mynewbranch'
```

7.Merging Branches:

To Merge changes from one branch to another use the 'git merge' command.for example to merge changes from feature-branch into another branch.

```
D:\Devops>git merge newbranch  
Already up to date.
```

8.cloning a repository:

To clone a remote git repository to your local machine use the 'git clone'

git clone https://narendra/documents

```
Cloning into 'Documents'...  
remote: Enumerating objects: 37, done.  
remote: Counting objects: 100% (37/37), done.  
remote: Compressing objects: 100% (33/33), done.  
remote: Total 37 (delta 5), reused 0 (delta 0), pack-reused 0  
Receiving objects: 100% (37/37), 1.91 MiB | 2.72 MiB/s, done.  
Resolving deltas: 100% (5/5), done.
```

9.pushing changes to a remote repository:

To push your local changes to a remote repository use 'git push origin main'

```
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 8 threads  
D:\Devops>git push -u origin main  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 335 bytes | 335.00 KiB/s, done.  
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0  
To https://github.com/narendra/myfile.git  
44c9bc1..133e0f3 main -> main  
branch 'main' set up to track 'origin/main'.
```

10.pulling changes from a remote repository:

To get the latest changes from a remote repository use the 'git pull' command

git pull https://narendra/documents

```
remote: Enumerating objects: 18, done.  
remote: Counting objects: 100% (18/18), done.  
remote: Compressing objects: 100% (16/16), done.  
Unpacking objects: 100% (18/18), 110.28 KiB | 1.38 MiB/s, done.  
remote: Total 18 (delta 0), reused 0 (delta 0), pack-reused 0  
From https://github.com/narendranaidu/documents  
   18c1b1d..0000000  master -> master
```