

# Lab Manual- Git Command

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## Table of Contents

<b>1</b>	<b>OBJECTIVE .....</b>	<b>3</b>
<b>2</b>	<b>PRE-REQUISISTE .....</b>	<b>3</b>
<b>3</b>	<b>Start a New Git Repository .....</b>	<b>3</b>
3.1	Create a Repository in Git Hub without Initializing it .....	3
3.2	Create a Repository in using GIT CMD .....	4
<b>4</b>	<b>Adding new Code File Push to Repo.....</b>	<b>6</b>
<b>5</b>	<b>Working with Branch .....</b>	<b>7</b>

## 1 OBJECTIVE

This Lab Exercise is meant for DevOps Engineer who use the command line to manage their git . In this lab we are going to practice the below topic

- Create a directory
- Go into the new directory.
- Type `git init`.
- Write some code.
- Type `git add` to add the files
- Type `git commit`.
- Git Branch

## 2 PRE-REQUISITE

- Prior knowledge of Basic GIT Hub Operation
- GIT Tool Installed
- A local Computer with 4 CPU, 16 GB RAM, 200 GB disk space

## 3 Start a New Git Repository

We will be creating a new Repository on Github.com using the command line tool

### 3.1 Create a Repository in Git Hub without Initializing it

**Step1:** Create a new Repository in git hub and name it **demorepo**

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner: ShrutiSinha / Repository name: demorepo **Repository Name**

Great repository names are short and memorable. Need inspiration? How about furry-guacamole?

Description (optional)

☒ Public  
Anyone can see this repository. You choose who can commit.

☐ Private  
You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

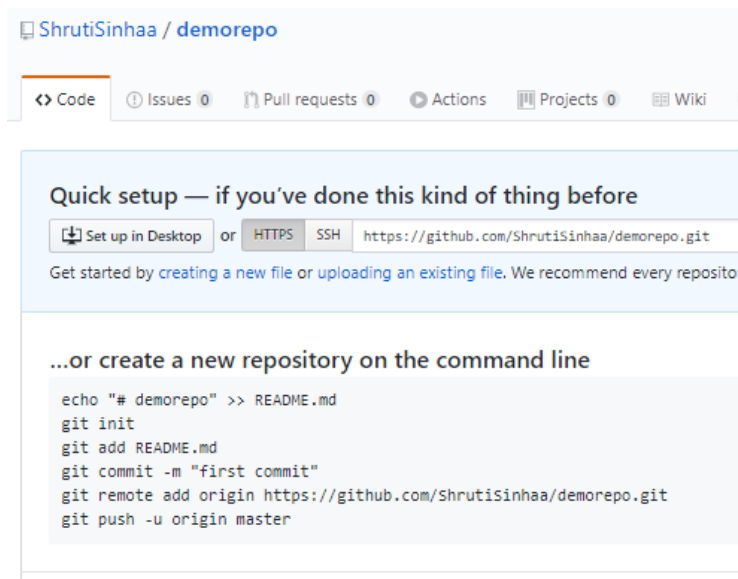
☒ Initialize this repository with a README  
This will let you immediately clone the repository to your computer. **Do Not Select It**

Add .gitignore: None | Add a license: None ⓘ

Create repository

**Step2:** Do not select **Initialize the Repository**

**Step3:** Click Create Repository



**Step4:** Note Down the command we can go to use to create a local repository in Git CMD and push it

## 3.2 Create a Repository in using GIT CMD

**Step1:** Open a command prompt and create a Directory **demorepo** in c:\ drive

**C:\> md demorepo**

```
C:\>md demorepo
```

**Step2:** Now Go inside the demorepo directory

**C:\> cd demorepo**

**C:\demorepo>**

```
C:\>cd demorepo
C:\demorepo>
```

**Step3:** Now create two files **README.md** and **test.txt**

**C:\> echo "This is Test of GIT Repo" >> README.md**

**C:\> echo "This is sample code " >> test.txt**

```
C:\demorepo>echo "This is Test of GIT Repo" >> README.md
C:\demorepo>echo "This is sample code " >> test.txt
```

**Step4:** Now initialize the local repository

C:\ git init

```
C:\demorepo>git init  
Initialized empty Git repository in C:/demorepo/.git/
```

**Step5:** Now add the authentication method

C:\ git config --global user.email "shruti.sinha@hotmail.com"

C:\ git config --global user.name "shrutisinhaa"

```
C:\demorepo>git config --global user.email "shruti.sinha@hotmail.com"  
C:\demorepo>git config --global user.name "shrutisinhaa"
```

**Step6:** Now add both the file

C:\ git add README.md

C:\ git add test.txt

```
C:\demorepo>git add README.md  
C:\demorepo>git add test.txt
```

**Step7:** Now commit the file and repo

C:\ git commit -m "first commit"

```
C:\demorepo>git commit -m "first commit"  
[master (root-commit) 0514d6d] first commit  
2 files changed, 2 insertions(+)  
create mode 100644 README.md  
create mode 100644 test.txt
```

**Step8 :** Now run below command to push you local repo to git hub( The URL you can get from your Repo)

C:\ git remote add origin <https://github.com/ShrutiSinhaa/demorepo.git>

```
C:\demorepo>git remote add origin https://github.com/shrutisinhaa/demorepo.git
```

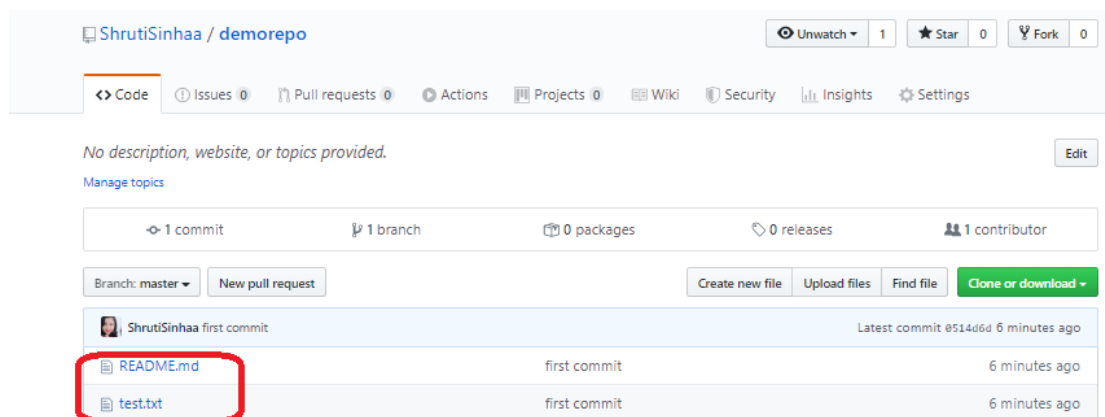
**Step9 :** Now run below command to push you local repo origin (Git Hub)

C:\ git push -u origin master

```
C:\demorepo>git push -u origin master
Fatal: HttpRequestException encountered.
Username for 'https://github.com': shrutisinhaa
Password for 'https://shrutisinhaa@github.com':
Counting objects: 4, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 302 bytes | 0 bytes/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/shrutisinhaa/demorepo.git
 * [new branch]      master -> master
Branch master set up to track remote branch master from origin.
```

Type git hub username and password

**Step10 :** Now Check in git hub



## 4 Adding new Code File Push to Repo

echo "this is the test" >> test2.txt

```
C:\demorepo>echo "this is the test" >> test2.txt
```

git add test2.txt

```
C:\demorepo>git add test2.txt
```

git commit -m " This is second commit"

```
C:\demorepo>git commit -m " This is second commit"
[master 6839b2b] This is second commit
1 file changed, 1 insertion(+)
create mode 100644 test2.txt
```

git push --all

```
c:\demorepo>git push --all
Fatal: HttpRequestException encountered.
Username for 'https://github.com': shrutisinhaa
Password for 'https://shrutisinhaa@github.com':
Counting objects: 3, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 327 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/ShrutiSinhaa/demorepo.git
0514d6d..6839b2b master -> master
```

## 5 Working with Branch

List all Branch

**git branch**

```
c:\demorepo>git branch
* master
```

Create a new child branch

**git branch test**

```
c:\demorepo>git branch test
```

**git branch**

```
c:\demorepo>git branch
* master
test
```

Switching to a branch

**git checkout test**

```
c:\demorepo>git checkout test
Switched to branch 'test'
```

Notice the \* sign moved before test

**git branch**

```
c:\demorepo>git branch
master
* test
```

Return to master

```
c:\demorepo>git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
```