DEPARTMENT OF INFORMATION TECHNOLOGY ENGINEERING

Semester	BE Semester VIII – INFT
Subject	DEVOPS Lab
Subject Professor In-charge	Prof. Rohit Barve
Lab Professor In-charge	Prof. Rohit Barve

Student Name	Janhavi Gole	
Roll Number	19101A2011	
Grade and Subject Teacher's Signature		

Experiment Number	2	
Experiment Title	Perform Version Control using GitHub.	
Resources / Apparatus Required	Hardware: Computer	Software: GIT and GitHub
Procedure or Steps	Create folder Initialize git : git init Create File1.txt and File2.txt in same folder Check status of git : git status Add both files on git : git add . Commit file1 : git commit File1.txt -m "Commit 1 on File1.txt" Commit file2 : git commit File2.txt -m "Commit 1 on File2.txt"	

```
C:\Users\hp\Desktop\Devops\git practice>git init
Initialized empty Git repository in C:/Users/hp/Desktop/Devops/git practice/.git/

C:\Users\hp\Desktop\Devops\git practice>git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        File1.txt
        File2.txt

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

C:\Users\hp\Desktop\Devops\git practice>git add .

C:\Users\hp\Desktop\Devops\git practice>git commit File1.txt -m "Commit 1 on File1.txt"
[master (root-commit) d7051ad] Commit 1 on File1.txt
 1 file changed, 1 insertion(+)
 create mode 100644 File1.txt

C:\Users\hp\Desktop\Devops\git practice>git commit File2.txt -m "Commit 1 on File2.txt"
[master 0f8e7f7] Commit 1 on File2.txt
 1 file changed, 1 insertion(+)
 create mode 100644 File2.txt
```

Create branch b1 : git branch b1

Create branch b2 : git branch b2

Switched to b1 : git checkout b1

Create File3.txt in same folder.

Add file3 on git : git add File3.txt

Commit file3 : git commit File3.txt -m "Commit 1 on File3.txt for b1"

Switched to b2 : git checkout b2

Create File4.txt in same folder.

Add file4 on git : git add File4.txt

Commit file4 : git commit File4.txt -m "Commit 1 on File4.txt for b2"

```
C:\Users\hp\Desktop\Devops\git practice>git branch b1

C:\Users\hp\Desktop\Devops\git practice>git branch b2

C:\Users\hp\Desktop\Devops\git practice>git checkout b1
Switched to branch 'b1'

C:\Users\hp\Desktop\Devops\git practice>git add File3.txt

C:\Users\hp\Desktop\Devops\git practice>git commit File3.txt -m "Commit 1 on File3.txt for b1"
[b1 e12fec0] Commit 1 on File3.txt for b1
 1 file changed, 1 insertion(+)
 create mode 100644 File3.txt

C:\Users\hp\Desktop\Devops\git practice>git checkout b2
Switched to branch 'b2'

C:\Users\hp\Desktop\Devops\git practice>git add File4.txt

C:\Users\hp\Desktop\Devops\git practice>git commit File4.txt -m "Commit 1 on File3.txt for b2"
[b2 1a3a94c] Commit 1 on File3.txt for b2
 1 file changed, 1 insertion(+)
 create mode 100644 File4.txt
```

Create branch b4 : git branch b4

Switched to b4 : git checkout b4

Commit file4 : git commit File4.txt -m "Commit 2 on File4.txt for b4"

Switched to b1: git checkout b1

Create branch b3 : git branch b3

Commit file3 : git commit File3.txt -m "Commit 2 on File3.txt for b3"

```
C:\Users\hp\Desktop\Devops\git practice>git branch b4

C:\Users\hp\Desktop\Devops\git practice>git checkout b4
Switched to branch 'b4'

C:\Users\hp\Desktop\Devops\git practice>git commit File4.txt -m "Commit 2 on File3.txt for b4"
[b4 4ece392] Commit 2 on File3.txt for b4
 1 file changed, 2 insertions(+), 1 deletion(-)

C:\Users\hp\Desktop\Devops\git practice>git checkout b3
error: pathspec 'b3' did not match any file(s) known to git

C:\Users\hp\Desktop\Devops\git practice>git checkout b1
Switched to branch 'b1'

C:\Users\hp\Desktop\Devops\git practice>git branch b3

C:\Users\hp\Desktop\Devops\git practice>git checkout b3
Switched to branch 'b3'

C:\Users\hp\Desktop\Devops\git practice>git commit File3.txt -m "Commit 2 on File3.txt for b3"
[b3 c83f010] Commit 2 on File3.txt for b3
 1 file changed, 2 insertions(+), 1 deletion(-)
```

Create an account on GitHub and create a new repository

Copy the repository link and run

git remote add origin "https://github.com/PrashikNikumbe/gitPractice.git"

push master branch : git push origin master

Push branch b1 : git push origin b1

Push branch b2 : git push origin b2

Push branch b3 : git push origin b3
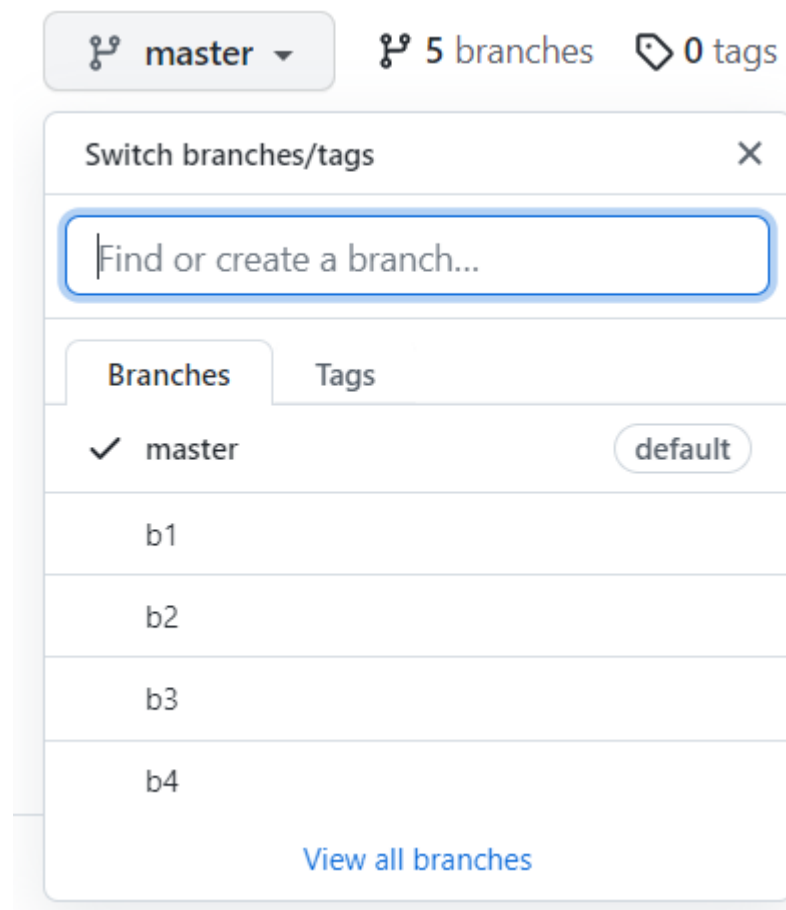
Push branch b4 : git push origin b4

```
C:\Users\hp\Desktop\Devops\git practice>git push origin master
```

```
C:\Users\hp\Desktop\Devops\git practice>git push origin b1
```

```
C:\Users\hp\Desktop\Devops\git practice>git push origin b2
```

```
C:\Users\hp\Desktop\Devops\git practice>git push origin b3
```

```
C:\Users\hp\Desktop\Devops\git practice>git push origin b4
```

master ▾   5 branches   0 tags

Switch branches/tags   ✕

Find or create a branch...

Branches   Tags

✓ master   default

b1

b2

b3

b4

View all branches

Now we can share the repository git link with the other group members so they can
clone it, change the files, commit it and push it on github.

	For other members to push it in our repository, we need to make them the collaborator in github setting. | File1.txt	Second commit on file1	4 hours ago

File2.txt	Second commit on file2	4 hours ago	
			
			👥 **2 contributors**
			
			``
			3 lines (2 sloc) 48 Bytes
			
			    1 This is a file1.
			    2
			    3 This is Git Activity on file 1
			``
			
			As we can see that the commit is done on my repository by other member and the content is changed. Now I can clone the repository by below command,
			
			git clone "https://github.com/PrashikNikumbe/gitPractice.git"

Conclusion	We learn how to push the files on GitHub and also how to clone the GitHub repository.