Git and GitHub assignment

Basic git commands

1. Create a directory 'project_dir' & cd to 'project_dir'.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~

$ mkdir project_dir

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~

$ cd project_dir
```

2. Initialize git version database. (git init)

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir
$ git init
Initialized empty Git repository in C:/Users/Deepti Sardar/project_dir/.git/
```

3. Create a new file index.html.

4. Check the git status. You should find index.html as untracked file.

5. Stage the index.html file.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git add index.html
```

6. Commit index.html

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git commit -m "comitting an html file"
[master (root-commit) 7425dcd] comitting an html file
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html
```

7. Make few changes in index.html & create a new file info.txt file.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)

$ git status
On branch master
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: index.html

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

no changes added to commit (use "git add" and/or "git commit -a")
```

8. Check git status. You should find index.html & info.txt as untracked files.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)

$ git status
On branch master
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: index.html

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

no changes added to commit (use "git add" and/or "git commit -a")
```

9. Configure GIT to ignore all txt files.

```
Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
Untracked files:
  (use "git add <file>..." to include in what will be committed)
no changes added to commit (use "git add" and/or "git commit -a")
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git add --a
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
         new file: .gitignore
         modified: index.html
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git commit -m "added text in html and also added gitignore"
[master Ofc2c62] added text in html and also added gitignore
 2 files changed, 4 insertions(+)
 create mode 100644 .gitignore
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
nothing to commit, working tree clean
```

10. Again check the git status. You should find only index.html as untracked file.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file: .gitignore
    modified: index.html
```

11. State & commit index.html

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)

$ git commit -m "added text in html and also added gitignore"

[master Ofc2c62] added text in html and also added gitignore

2 files changed, 4 insertions(+)

create mode 100644 .gitignore

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)

$ git status

On branch master

nothing to commit, working tree clean
```

12. Log all your comments so far.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git log
commit Ofc2c626c923656911047d5559a262021196ec37 (HEAD -> master)
Author: unknown <deeptisardar11@gmail.com>
Date: Mon Jan 18 20:42:17 2021 +0530

added text in html and also added gitignore

commit 7425dcd4d9545436bb17430c637b4bfc177d40ad
Author: unknown <deeptisardar11@gmail.com>
Date: Mon Jan 18 20:30:14 2021 +0530

comitting an html file
```

13. Make some changes in index.html.

14. Revert the change made in the previous step using git command.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git checkout -- .

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
nothing to commit, working tree clean
```

15. Again change index.html.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
(use "git restore --staged <file>..." to unstage)

modified: index.html
```

16. Stage index.html

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified: index.html
```

17. Revert back the last stage.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git reset --hard
HEAD is now at Ofc2c62 added text in html and also added gitignore

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git status
On branch master
nothing to commit, working tree clean
```

18. Rename 'add' command to 'my-add'.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ alias my_add='git add'
```

19. Using my add command Stage index.html again & commit the changes.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ my_add index.html

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git commit -m "Committing changes"
[master f2214ba] Committing changes
1 file changed, 1 insertion(+)
```

20. Revert the last commit.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git revert f2214ba6c61a3676b34a94a554afc522756e37fd
[master 7e13d4d] Revert "Committing changes"
1 file changed, 1 deletion(-)

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/project_dir (master)
$ git log
commit 7e13d4ddf26d77cc91c8819f31d1bb8f5a306b6c (HEAD -> master)
Author: unknown <deeptisardar11@gmail.com>
Date: Mon Jan 18 21:15:52 2021 +0530

Revert "Committing changes"

This reverts commit f2214ba6c61a3676b34a94a554afc522756e37fd.

commit f2214ba6c61a3676b34a94a554afc522756e37fd
Author: unknown <deeptisardar11@gmail.com>
Date: Mon Jan 18 21:13:47 2021 +0530

Committing changes

Committing changes
```

Basic branch commands

Objective: Commit HTML, CSS & JavaScript assignments into GIT.

SECTION-1 (HTML assignments) - Steps to follow:

- 21. First take a backup of your assignments & projects. This is required because due to incorrect GIT operation you may lose your files.
- 22. Create an empty directory 'Assignments' & cd to 'Assignments'.

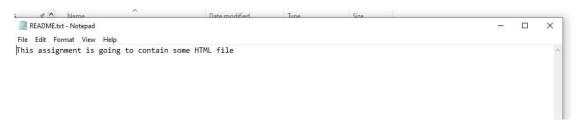
```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~

$ mkdir Assignments

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~

$ cd Assignments
```

23. Create a file README.txt inside 'Assignments' & write few lines about the contents of 'Assignments' folder.



24. Commit README.txt file.

25. Now create a new branch 'html-assignments'.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch html-assignment
```

26. Switch to 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git checkout html-assignment
Switched to branch 'html-assignment'
```

27. Copy all HTML assignments inside 'Assignments' folder.

```
$ git status
On branch html-assignment
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file: html_assignment.html
    new file: index.html
```

28. Commit HTML assignments into 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git status
On branch html-assignment
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file: html_assignment.html
```

29. Make minor changes into few files belonging to 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)

$ git status
On branch html-assignment
Changes to be committed:
    (use "git restore --staged <file>..." to unstage)
        new file: html_assignment.html
        new file: index.html

Changes not staged for commit:
    (use "git add/rm <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
        modified: html_assignment.html
```

30. Commit those changed files.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git commit -m "added a line"
[html-assignment f284125] added a line
2 files changed, 2 insertions(+), 3 deletions(-)
delete mode 100644 index.html

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git status
On branch html-assignment
nothing to commit, working tree clean
```

31. Switch to master branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git checkout master
Switched to branch 'master'
```

32. Make minor changes into README.txt file & commit those changes into master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git status
On branch master
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: README.txt.txt

no changes added to commit (use "git add" and/or "git commit -a")

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git commit -m "added few lines here"
[master 71d08c4] added few lines here
1 file changed, 3 insertions(+), 1 deletion(-)
```

33. Again switch to 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
8 git checkout html-assignment
Switched to branch 'html-assignment'
```

34. Make minor changes into few files belonging to 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)

$ git status
On branch html-assignment
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: html_assignment.html

no changes added to commit (use "git add" and/or "git commit -a")
```

35. Commit those changes.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git commit -m "added few lines here in the html file"
[html-assignment 3dcdc2b] added few lines here in the html file
1 file changed, 1 insertion(+)
```

36. Switch to master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (html-assignment)
$ git checkout master
Switched to branch 'master'
```

37. Merge 'html-assignments' branch into master. Confirm all html assignments are shown in master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git merge master html-assignment
Merge made by the 'recursive' strategy.
html_assignment.html | 6 +++++++
1 file changed, 6 insertions(+)
create mode 100644 html_assignment.html
```

38. Finally delete the 'html-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch -d html-assignment
Deleted branch html-assignment (was 3dcdc2b).
```

SECTION-2 - (CSS assignments) Steps to follow:

1. Create a new branch 'css-assignments'.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch css-assignment
```

2. Switch to 'css-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git checkout css-assignment
Switched to branch 'css-assignment'
```

3. Copy all CSS assignments inside 'Assignments' folder.

.git	18-01-2021 23:43	File folder	
css_file	18-01-2021 23:47	Cascading Style S	1 KB
ntml_assignment	18-01-2021 23:40	Chrome HTML Do	1 KB
README.txt	18-01-2021 23:39	Text Document	1 KB

4. Commit CSS assignments into 'css-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)

$ git status
On branch css-assignment
Untracked files:
    (use "git add <file>..." to include in what will be committed)
        css_file.css

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

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)

$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)

$ git commit -m "a new css file"
[css-assignment ec83333d] a new css file

1 file changed, 2 insertions(+)
    create mode 100644 css_file.css
```

5. Make minor changes into README.txt file on line 1 belonging to 'css-assignments' branch.

6. Commit those changed files.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git commit -m "added some new changes"
[css-assignment 029f877] added some new changes
2 files changed, 4 insertions(+), 2 deletions(-)
```

7. Switch to master branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git checkout master
Switched to branch 'master'
```

8. Make minor changes into README.txt file on line 3 & commit those changes into master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git status
On branch master
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: README.txt.txt

no changes added to commit (use "git add" and/or "git commit -a")

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git commit -m "added something on line 3"

[master 27e4c5f] added something on line 3

1 file changed, 3 insertions(+), 1 deletion(-)
```

9. Again switch to 'css-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git checkout css-assignment
Switched to branch 'css-assignment'
```

10. Make minor changes into few files belonging to 'css-assignments' branch.

11. Commit those changes.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git commit -m "made some changes in css file"
[css-assignment c1d9f3d] made some changes in css file
1 file changed, 2 insertions(+), 2 deletions(-)
```

12. Switch to master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (css-assignment)
$ git checkout master
Switched to branch 'master'
```

13. Merge 'css-assignments' branch into master. Confirm all css assignments are shown in master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git merge master css-assignment
Auto-merging README.txt.txt
CONFLICT (content): Merge conflict in README.txt.txt
Automatic merge failed; fix conflicts and then commit the result.
```

14. Finally delete the 'css-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch -d css-assignment
Deleted branch css-assignment (was c1d9f3d).

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch
* master
```

SECTION-3 - (JavaScript assignments) Steps to follow:

1. Create a new branch 'js-assignments'.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch js-assignment
```

2. Switch to 'js-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git checkout js-assignment
Switched to branch 'js-assignment'
```

3. Copy all JavaScript assignments inside 'Assignments' folder.

.git	19-01-2021 00:25	File folder	
css_file	18-01-2021 23:58	Cascading Style S	1 KB
ntml_assignment	18-01-2021 23:40	Chrome HTML Do	1 KB
javascript	19-01-2021 00:24	JavaScript File	1 KB
README.txt	18-01-2021 23:58	Text Document	1 KB

4. Commit JavaScript assignments into 'js-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git commit -m "added js assignment file"
[js-assignment b61f38a] added js assignment file

1 file changed, 15 insertions(+)

create mode 100644 javascript.js
```

5. Make minor changes into README.txt file on line 1 belonging to 'js-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git status
On branch js-assignment
Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git restore <file>..." to discard changes in working directory)

modified: README.txt.txt
```

6. Commit those changed files.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git commit -m "added change in line 1 of README file"

[js-assignment 40d685e] added change in line 1 of README file

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

7. Switch to master branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGw64 ~/Assignments (js-assignment)
$ git checkout master
Switched to branch 'master'
```

8. Make minor changes into README.txt file on line 1 & commit those changes into master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git status
On branch master
Changes not staged for commit:
   (use "git add <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
        modified: README.txt.txt

no changes added to commit (use "git add" and/or "git commit -a")

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)

$ git commit -m "added some more changes into README file"
[master 0e370f3] added some more changes into README file

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

9. Again switch to 'js-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git checkout js-assignment
Switched to branch 'js-assignment'
```

10. Make minor changes into few files belonging to 'js-assignments' branch.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git status
On branch js-assignment
Changes not staged for commit:
    (use "git add <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
        modified: javascript.js

no changes added to commit (use "git add" and/or "git commit -a")

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git add --a

Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

$ git commit -m "added some changes into js file"

[js-assignment f3ca783] added some changes into js file

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

11. Commit those changes.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)

§ git commit -m "added some changes into js file"

[js-assignment f3ca783] added some changes into js file

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

12. Switch to master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (js-assignment)
$ git checkout master
Switched to branch 'master'
```

13. Merge 'js-assignments' branch into master. Confirm all JavaScript assignments are shown in master.

```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git merge js-assignment
Auto-merging README.txt.txt
CONFLICT (content): Merge conflict in README.txt.txt
```

14. Finally delete the 'js-assignments' branch.

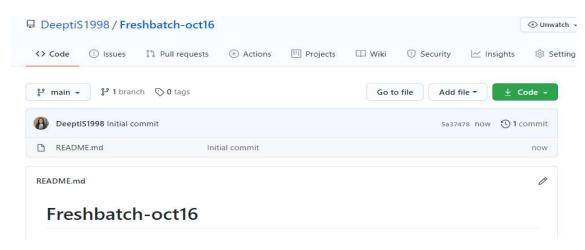
```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
$ git branch -d js-assignment
Deleted branch js-assignment (was f3ca783).
```

Git Remoting

Objective: Pushing source code into GITHUB & collaborate team members.

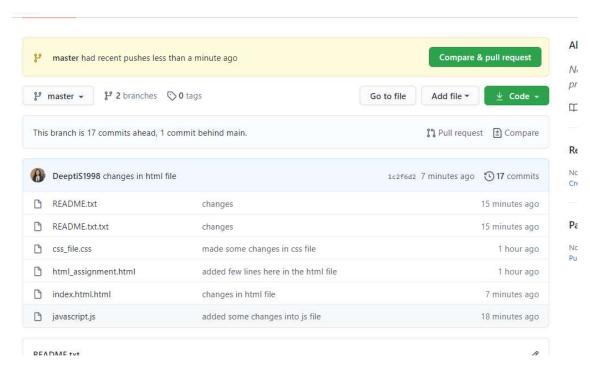
SECTION-1 (Pushing assignments to remote repository) - Steps to follow:

- 39. Create a github account if you do not have already.
- 40. Login on into github account.
- 41. Create new public repository 'freshersbatch-oct16'.



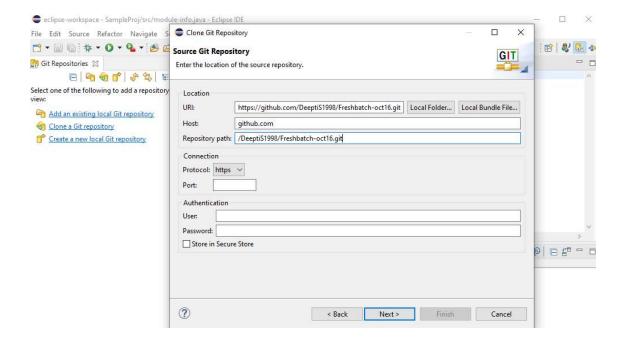
42. Commit & push any sample file to this repository under 'Assignments' directory.

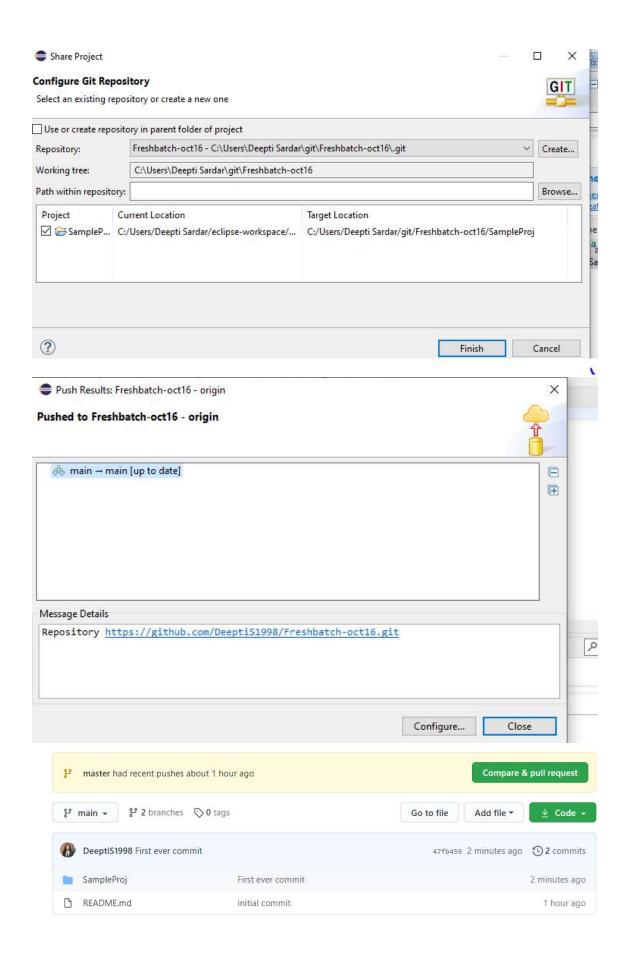
```
Deepti Sardar@LAPTOP-8RR3PDLU MINGW64 ~/Assignments (master)
 git push --set-upstream origin master
Logon failed, use ctrl+c to cancel basic credential prompt.
Enumerating objects: 50, done.
Counting objects: 100% (50/50), done.
Delta compression using up to 4 threads
Compressing objects: 100% (46/46), done.
Writing objects: 100% (50/50), 4.82 KiB | 235.00 KiB/s, done.
Total 50 (delta 19), reused O (delta O), pack-reused O
remote: Resolving deltas: 100% (19/19), done.
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:
             https://github.com/DeeptiS1998/Freshbatch-oct16/pull/new/master
remote:
To https://github.com/DeeptiS1998/Freshbatch-oct16.git
* [new branch]
                     master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```



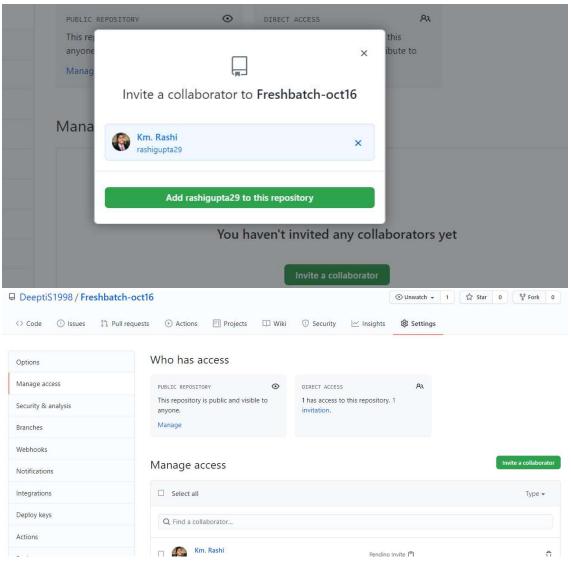
SECTION-2 (Pushing source code to remote repository using Eclipse GIT plugin) - Steps to follow:

1. One developer from project team will create eclipse projects 'SampleProj' & add sample source code files. Then commit all files through eclipse GIT plugin.





2. Collaborate other team members with your github account so that they can also modify the committed files.



3. Other developers from same team will checkout all files from remote repository. This might get conflicts since certain files fail to merge. In such case, merge it manually.



4. Commit & push the 'SampleProj' project.

B	DeeptiS1998 First ever commit		47fb459 1 hour ag
	SampleProj	First ever commit	
	README.md	Initial commit	