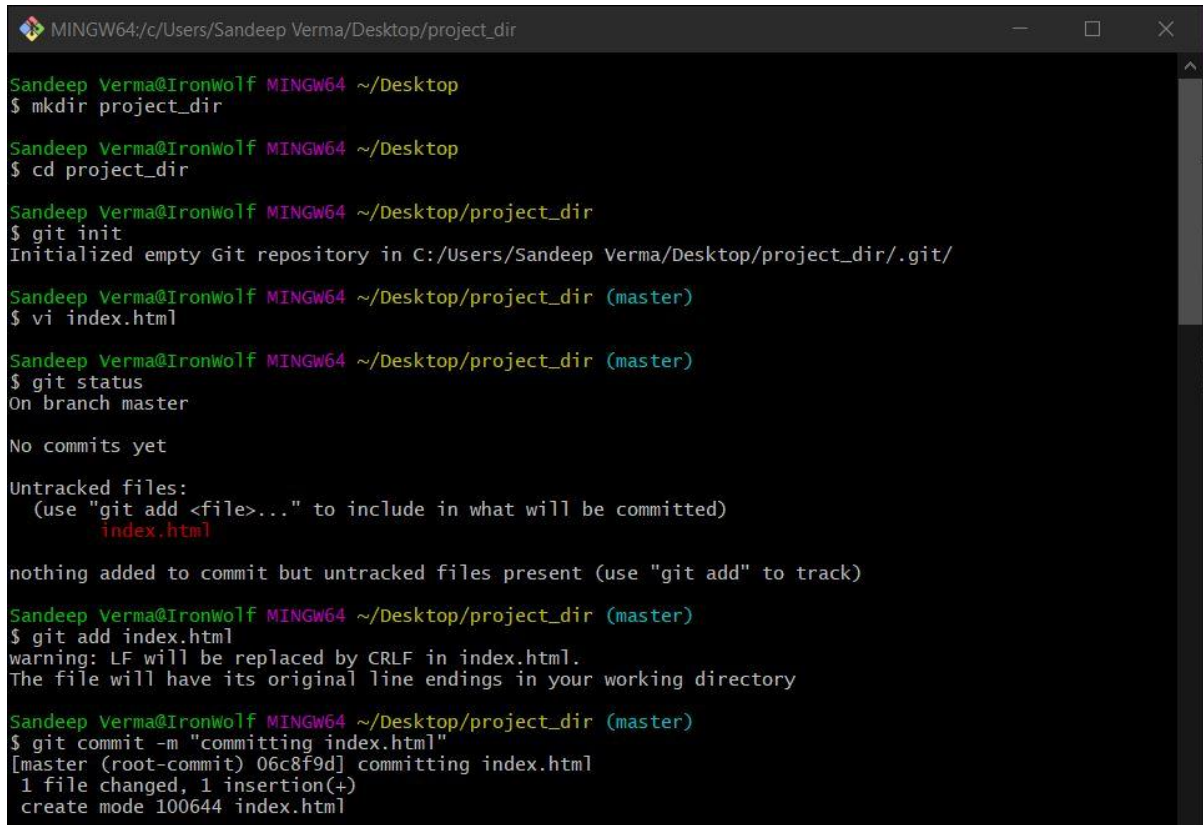# Git assignment

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

2. Initialize git version database. (git init)

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.

6. Commit index.html

Screenshot for 1-6

```
MINGW64:/c/Users/Sandeep Verma/Desktop/project_dir                                    —    □    ✕

Sandeep Verma@IronWolf MINGW64 ~/Desktop
$ mkdir project_dir

Sandeep Verma@IronWolf MINGW64 ~/Desktop
$ cd project_dir

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir
$ git init
Initialized empty Git repository in C:/Users/Sandeep Verma/Desktop/project_dir/.git/

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git status
On branch master

No commits yet

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

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git commit -m "committing index.html"
[master (root-commit) 06c8f9d] committing index.html
 1 file changed, 1 insertion(+)
 create mode 100644 index.html
```

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

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

9. Configure GIT to ignore all txt files.

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

11. State & commit index.html

Screenshot for 7-11

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi info.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/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

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi .gitignore

Sandeep Verma@IronWolf MINGW64 ~/Desktop/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)
        .gitignore

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git commit -a -m "index file modified"
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory
[master 712dc6e] index file modified
 1 file changed, 1 insertion(+)
```

12. Log all your comments so far.

13. Make some changes in index.html.

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

15. Again change index.html.

16. Stage index.html

17. Revert back the last stage.

Screenshot for 12-17

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git log
commit 712dc6ee3c6de5779b05b1dd165b8a00db70d46c (HEAD -> master)
Author: Sandeep Verma <sandeepverma2269@gmail.com>
Date:    Sat Jan 30 10:40:39 2021 +0530

    index file modified

commit 06c8f9d5fe2d401eaaa70e6e8417604a51d03bb4
Author: Sandeep Verma <sandeepverma2269@gmail.com>
Date:    Sat Jan 30 10:37:03 2021 +0530

    committing index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git checkout --
M       index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ cat index.html
git hub
local repo
github repository

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git checkout -- .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ cat index.html
git hub
local repo

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git add index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git checkout -- .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ cat index.html
git hub
local repository

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git reset --hard
HEAD is now at 712dc6e index file modified

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ cat index.html
git hub
local repo
```

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

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

20. Revert the last commit.

Screenshot for 18-20

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ alias my_add='git add'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ my_add index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git commit -m "changes after my_add=add"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        info.txt

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git log--oneline
git: 'log--oneline' is not a git command. See 'git --help'.

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git log --oneline
712dc6e (HEAD -> master) index file modified
06c8f9d committing index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ git reset 712dc6e
```

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'.

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

24. Commit README.txt fileAssignments

Screenshot for 21-24

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ mkdir Assignments

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir (master)
$ cd Assignments/

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git init
Initialized empty Git repository in C:/Users/Sandeep Verma/Desktop/project_dir/Assignments/.git/

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ vi Readme.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git status
On branch master

No commits yet

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

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git add .
warning: LF will be replaced by CRLF in Readme.txt.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git commit -m "Added README.txt"
[master (root-commit) 4ae7f97] Added README.txt
 1 file changed, 1 insertion(+)
 create mode 100644 Readme.txt
```

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

26. Switch to 'html-assignments' branch.

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

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

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

30. Commit those changed files.

Screenshot for 25-30

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git branch html-assignments

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout html-assignments
Switched to branch 'html-assignments'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ touch index.html about.html contact.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git status
On branch html-assignments
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        about.html
        aboutus.html
        contact.html
        index.html

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git commit -m "html files"
[html-assignments ce58046] html files
 4 files changed, 21 insertions(+)
 create mode 100644 about.html
 create mode 100644 aboutus.html
 create mode 100644 contact.html
 create mode 100644 index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ vi index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git commit -m "committing after modifying index.html"
[html-assignments be9ad48] committing after modifying index.html
 1 file changed, 2 insertions(+), 2 deletions(-)
```

31. Switch to master branch.

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

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

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

35. Commit those changes

Screenshot for 31-35

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git checkout master
Switched to branch 'master'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ vi Readme.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/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

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git add .
warning: LF will be replaced by CRLF in Readme.txt.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git commit -m "modified readme file"
[master fb7bdde] modified readme file
 1 file changed, 1 insertion(+), 1 deletion(-)

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout html-assignments
Switched to branch 'html-assignments'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ vi about.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignments)
$ git commit -m "modified about file"
On branch html-assignments
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:   about.html

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

36. Switch to master.

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

38. Finally delete the 'html-assignments' branch

Screenshot for 36-38

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (html-assignmer
$ git checkout master
Switched to branch 'master'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git merge html-assignments
hint: Waiting for your editor to close the file...
[main 2021-02-10T18:21:55.670Z] update#setState idle
Merge made by the 'recursive' strategy.
 about.html    | 7 +++++++
 aboutus.html  | 7 +++++++
 contact.html  | 7 +++++++
 index.html    | 7 +++++++
 4 files changed, 28 insertions(+)
 create mode 100644 about.html
 create mode 100644 aboutus.html
 create mode 100644 contact.html
 create mode 100644 index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ ls
Readme.txt  about.html  aboutus.html  contact.html  index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git branch -d html-assignments
Deleted branch html-assignments (was 762bc3e).
```

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

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

2. Switch to 'css-assignments' branch.

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

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

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

6. Commit those changed files.

7. Switch to master branch

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

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

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

11. Commit those changes.

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ vi Readme.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git add .
warning: LF will be replaced by CRLF in about.css.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git commit -m "modified readme in master"
[master eea3dc5] modified readme in master
 2 files changed, 3 insertions(+), 1 deletion(-)
 create mode 100644 about.css

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout css-assignments
Switched to branch 'css-assignments'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (css-assignments)
$ vi about.css

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (css-assignments)
$ git add .
warning: LF will be replaced by CRLF in about.css.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (css-assignments)
$ git commit -m "modified about file"
[css-assignments 5e9f522] modified about file
 1 file changed, 2 insertions(+)
```

12. Switch to master.
13. Merge 'css-assignments' branch into master. Confirm all css assignments are shown in master.
14. Finally delete the 'css-assignments' branch.

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (css-assignments)
$ git checkout master
Switched to branch 'master'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git merge css-assignments
CONFLICT (add/add): Merge conflict in about.css
Auto-merging about.css
Auto-merging Readme.txt
CONFLICT (content): Merge conflict in Readme.txt
Automatic merge failed; fix conflicts and then commit the result.

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master|MERGING)
$ git status
On branch master
You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Changes to be committed:
        new file:   body.css

Unmerged paths:
  (use "git add <file>..." to mark resolution)
        both modified:   Readme.txt
        both added:      about.css


Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master|MERGING)
$ git branch -d css-assignments
error: The branch 'css-assignments' is not fully merged.
If you are sure you want to delete it, run 'git branch -D css-assignments'.

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master|MERGING)
$ git checkout master
error: you need to resolve your current index first
Readme.txt: needs merge
about.css: needs merge

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master|MERGING)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master|MERGING)
$ git commit -m "committing all files"
[master 39ad420] committing all files

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout master
Already on 'master'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git merge css-assignments
Already up to date.

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git branch -d css-assignments
Deleted branch css-assignments (was 5e9f522).
```

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

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

2. Switch to 'js-assignments' branch.

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

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

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git branch js-assignment

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout js-assignment
Switched to branch 'js-assignment'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ touch index.js contact.js

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git status
On branch js-assignment
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        contact.js
        index.js

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

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git commit -m "add js files"
[js-assignment a4b1f63] add js files
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 contact.js
 create mode 100644 index.js
```

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

6. Commit those changed files.

7. Switch to master branch.

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

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

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

11. Commit those changes.

12. Switch to master

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ vi Readme.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git commit -m "commiting changes"
[js-assignment 333db17] commiting changes
 1 file changed, 4 insertions(+)

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git checkout master
Switched to branch 'master'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ ls
Readme.txt  about.css  about.html  aboutus.html  body.css  contact.html  index.html

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ vi Readme.txt

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git add .

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git commit -m "readme file modify"
[master a48b654] readme file modify
 1 file changed, 1 insertion(+)

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git checkout js-assignment
Switched to branch 'js-assignment'

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ vi index.js

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git add .
warning: LF will be replaced by CRLF in index.js.
The file will have its original line endings in your working directory

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (js-assignment)
$ git commit -m "changes in index.js"
[js-assignment ce1082f] changes in index.js
 1 file changed, 1 insertion(+)

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/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.
14. Finally delete the 'js-assignments' branch.

```
Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git merge js-assignment
Auto-merging Readme.txt
hint: Waiting for your editor to close the file...
[main 2021-02-10T18:44:46.465Z] update#setState idle
Merge made by the 'recursive' strategy.
 Readme.txt | 4 ++++
 contact.js | 0
 index.js   | 1 +
 3 files changed, 5 insertions(+)
 create mode 100644 contact.js
 create mode 100644 index.js

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git merge js-assignment
Already up to date.

Sandeep Verma@IronWolf MINGW64 ~/Desktop/project_dir/Assignments (master)
$ git branch -d js-assignment
Deleted branch js-assignment (was ce1082f).
```

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.

Ans: https://github.com/SandeepVerma2/Assignments.git