Git and GitHub 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

```
MINGW64:/c/Users/YOGESH/OneDrive/Desktop/project_dir
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop
$ mkdir project_dir
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop
Postman.lnk PrimaryPage/project_dir/
 OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop
$ cd project_dir/
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir
$ git init
Initialized empty Git repository in C:/Users/YOGESH/OneDrive/Desktop/project_dir/.git/
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ touch index.html
//OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/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)
nothing added to commit but untracked files present (use "git add" to track)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master) $ git commit -m "First commit"
[master (root-commit) 27f7f15] First commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html
 OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git status
On branch master
nothing to commit, working tree clean
```

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.

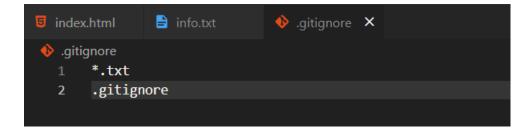
```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)

$ 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")
```

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

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/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

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

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)

§ git add .

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)

§ git commit -m "Changed index.html and ignored all txt files"

[master 5bf31a6] Changed index.html and ignored all txt files
1 file changed, 12 insertions(+)

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)

§ git status
On branch master
nothing to commit, working tree clean
```

12. Log all your comments so far.

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)

$ git log
commit 5bf31a6d94222481b3d6df79d18ba9d215fed60f (HEAD -> master)
Author: Yogesh <itzyogeshsharma@gmail.com>
Date: Wed Sep 29 22:40:14 2021 +0530

Changed index.html and ignored all txt files

commit 27f7f15261e1dbeab26540f2b9a26082b2fbfaf5
Author: Yogesh <itzyogeshsharma@gmail.com>
Date: Wed Sep 29 22:29:06 2021 +0530

First commit
```

13. Make some changes in index.html.

```
index.html M × info.txt info.txt info.txt
index.html > ♦ html > ♦ body > ♦ h1
       <!DOCTYPE html>
       <html lang="en">
       <head>
            <meta charset="UTF-8">
           <meta http-equiv="X-UA-Compatible" content="IE=edge">
           <meta name="viewport" content="width=device-width, initial-scale=1.0">
            <title>Document</title>
       </head>
       <body>
           <h1>First File</h1>
           <h1>2nd File</h1>
           <h1>3rd File</h1>
           <h1>4th File</h1>
  13
       </body>
       </html>
```

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

15. Again change index.html.

```
index.html M X

    index.html >  html >  body

      <!DOCTYPE html>
      <html lang="en">
      <head>
          <meta charset="UTF-8">
          <meta http-equiv="X-UA-Compatible" content="IE=edge">
          <meta name="viewport" content="width=device-width, initial-scale=1.0">
          <title>Document</title>
      </head>
      <body>
          <h1>First File</h1>
          <h1>Again File</h1>
 12
      </body>
      </html>
```

17. Revert back the last stage.

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/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)
no changes added to commit (use "git add" and/or "git commit -a")
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
         modified:
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git restore --staged index.html
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/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)
no changes added to commit (use "git add" and/or "git commit -a")
```

- 18. Rename 'add' command to 'my-add'.
- 19. Using my add command Stage index.html again & commit the changes.
- 20. Revert the last commit.

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git config --global alias.my-add add
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git my-add index.html

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git commit -m "final commit with rename add"
[master ebc8174] final commit with rename add
1 file changed, 2 insertions(+)

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/project_dir (master)
$ git status
On branch master
nothing to commit, working tree clean
```

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

- 1. First take a backup of your assignments & projects. This is required because due to incorrect GIT operation you may lose your files.
- 2. Create an empty directory 'Assignments' & cd to 'Assignments'.
- 3. Create a file README.txt inside 'Assignments' & write few lines about the contents of 'Assignments' folder.
- 4. Commit README.txt file.
- 5. Now create a new branch 'html-assignments'.
- 6. Switch to 'html-assignments' branch.
- 7. Copy all HTML assignments inside 'Assignments' folder.
- 8. Commit HTML assignments into 'html-assignments' branch.
- 9. Make minor changes into few files belonging to 'html-assignments' branch.
- 10. Commit those changed files.
- 11. Switch to master branch.
- 12. Make minor changes into README.txt file & commit those changes into master.
- 13. Again switch to 'html-assignments' branch.
- 14. Make minor changes into few files belonging to 'html-assignments' branch.
- 15. Commit those changes.
- 16. Switch to master.
- 17. Merge 'html-assignments' branch into master. Confirm all html assignments are shown in master.
- 18. Finally delete the 'html-assignments' branch.

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop

Color Assignments

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments

Souch README.txt

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments

Souch README.txt
```

```
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git commit -m "README file is added"
[master (root-commit) beae21f] README file is added
1 file changed, 1 insertion(+)
 create mode 100644 README.txt
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout -b html-assignments
Switched to a new branch 'html-assignments'
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git status
On branch html-assignments
Untracked files:
  (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~<mark>/OneDrive/Desktop/Assignments (html-assignments)</mark>
$ git commit -m "HTML Assignment"
[html-assignments ca7627d] HTML Assignment
1 file changed, 12 insertions(+)
create mode 100644 index.html
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git checkout master
Switched to branch 'master'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master) $ git checkout html-assignments
Switched to branch 'html-assignments'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git status
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)
no changes added to commit (use "git add" and/or "git commit -a")
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments) $ git commit -a -m "Did some minor changes" [html-assignments 495a0db] Did some minor changes 1 file changed, 1 insertion(+)
 OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git checkout master
Switched to branch 'master'
 OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/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)
no changes added to commit (use "git add" and/or "git commit -a")
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git commit -a -m "Did some minor changes in master"
[master 23dade0] Did some minor changes in master
1 file changed, 2 insertions(+), 1 deletion(-)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout html-assignments
Switched to branch 'html-assignments'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git commit -a -m "Again did some minor changes in html-assignment"
[html-assignments 6e796e1] Again did some minor changes in html-assignment
1 file changed, 1 insertion(+)
 'OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git checkout master
Switched to branch 'master'
 OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
's git merge html-assignments hint: Waiting for your editor to close the file... error: There was a problem with the editor '"C:\
\Program Files\\Sublime Text 3\\subl.exe" -w'.

Not committing merge; use 'git commit' to complete the merge.
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master|MERGING) $ git merge html-assignments
fatal: You have not concluded your merge (MERGE_HEAD exists).
Please, commit your changes before you merge.
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master|MERGING)
$ git commit -a -m "last commit"
[master 6ce9c11] last commit
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git status
On branch master
nothing to commit, working tree clean
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout html-assignments
Switched to branch 'html-assignments'
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (html-assignments)
$ git checkout master
Switched to branch 'master'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch
 html-assignments
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch -d html-assignments
Deleted branch html-assignments (was 6e796e1).
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch
```

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.
- 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.

```
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout -b css-assignments
Switched to a new branch 'css-assignments'
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git commit -m "css added"
[css-assignments 76d613d] css added
1 file changed, 13 insertions(+)
create mode 100644 map.css
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git status
On branch css-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)
no changes added to commit (use "git add" and/or "git commit -a")
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)

$ git commit -a -m "Changed readme file in line1"

[css-assignments ba1c9ac] Changed readme file in line1
1 file changed, 1 insertion(+), 1 deletion(-)
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git checkout master
Switched to branch 'master'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git commit -a -m "Changed readme file in line3 in master"
[master c1dbad5] Changed readme file in line3 in master
1 file changed, 2 insertions(+), 1 deletion(-)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout css-assignments
Switched to branch 'css-assignments'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git commit -a -m "Changed map.css in css-assignment branch"
[css-assignments 27f0470] Changed map.css in css-assignment branch 1 file changed, 3 insertions(+), 3 deletions(-)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (css-assignments)
$ git checkout master
Switched to branch 'master'
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)

$ git merge css-assignments
Auto-merging README.txt
CONFLICT (content): Merge conflict in README.txt
Automatic merge failed; fix conflicts and then commit the result.

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/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: map.css

Unmerged paths:

(use "git add <file>..." to mark resolution)

both modified: README.txt
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master|MERGING)
$ git add .

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master|MERGING)
$ git commit -m "conflict resolved"
[master 3b6207e] conflict resolved

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git merge css-assignments
Already up to date.

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch -d css-assignments
Deleted branch css-assignments (was 27f0470).
```

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.
- 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.

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

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout -b js-assignments
Switched to a new branch 'js-assignments'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git commit -m "JS Assignment Added"
[js-assignments f70cb7d] JS Assignment Added
1 file changed, 10 insertions(+)
create mode 100644 app.js
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git commit -a -m
error: switch `m' requires a value
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git commit -a -m "Minor changes in readme file in JS Branch"
[js-assignments 4f715ee] Minor changes in readme file in JS Branch
1 file changed, 1 insertion(+), 1 deletion(-)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git checkout master
Switched to branch 'master'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git add .
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git commit -m "Minor change in line1 in master"
[master 19984ed] Minor change in line1 in master
1 file changed, 1 insertion(+), 1 deletion(-)
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git checkout js-assignments
Switched to branch 'js-assignments'
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git commit -a -m "Minor changes in app.js file in JS Branch"
[js-assignments 416573a] Minor changes in app.js file in JS Branch
1 file changed, 1 insertion(+), 4 deletions(-)
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (js-assignments)
$ git checkout master
Switched to branch 'master'
```

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git merge js-assignments
Auto-merging README.txt
CONFLICT (content): Merge conflict in README.txt
Automatic merge failed; fix conflicts and then commit the result.
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master|MERGING)
$ git commit -a -m "merge conflict resolved"
[master 072dc63] merge conflict resolved
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch
  js-assignments
  master
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch -d js-assignments
Deleted branch js-assignments (was 416573a).
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git branch
OGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)
$ git status
On branch master
nothing to commit, working tree clean
```

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

SECTION-3 (Pushing assignments to remote repository) - Steps to follow:

- 1. Create a github account if you do not have already.
- 2. Login on into github account.
- 3. Create new public repository 'freshersbatch-oct16'.

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

```
YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)

§ git remote add origin https://github.com/itzyogesh/freshersbatch-oct16.git

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)

§ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'https://github.com/itzyogesh/freshersbatch-oct16.git'

YOGESH@DESKTOP-N8KT360 MINGW64 ~/OneDrive/Desktop/Assignments (master)

§ git push -u origin master
Enumerating objects: 46, done.
Counting objects: 100% (46/46), done.
Delta compression using up to 12 threads
Compressing objects: 100% (43/43), done.
Writing objects: 100% (46/46), 4.71 KiB | 688.00 KiB/s, done.
Total 46 (delta 16), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (16/16), done.
To https://github.com/itzyogesh/freshersbatch-oct16.git

* [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```

