

## Assignment #1.3

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**Peer : Muhammad Faizan Rafique (2303.005.KHI.DEG)**

1. Create a new git repository in a local directory.

```
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:     git config --global init.defaultBranch <name>
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:     git branch -m <name>
Initialized empty Git repository in /home/muhammadfaizanrafique/Assignment3/.git/
```

2. Create an empty file “numbers.txt” and commit it to the current (“main” or “master”) branch.

```
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ touch numbers.txt
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git commit -m "from master"
[master (root-commit) c5d73ae] from master
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 numbers.txt
```

3. Create two new branches: “odd” and “even”.

```
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git branch odd
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git branch even
```

4. Switch to the “odd” branch.

```
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git checkout odd
Switched to branch 'odd'
```

5. Edit the “numbers.txt” file by adding some odd numbers, then commit the change.

```
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ xdg-open numbers.txt
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git commit -m "from odd"
[odd dcc4d03] from odd
1 file changed, 1 insertion(+)
muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git checkout master
Switched to branch 'master'
```

6. Switch to the “even” branch.

```
Switched to branch 'even'  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git checkout even  
Switched to branch 'even'
```

7. Edit the “numbers.txt” file by adding some even numbers, then commit the change.

```
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ xdg-open numbers.txt  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git add .  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git commit -m "from even"  
[even 1b71519] from even  
1 file changed, 1 insertion(+)
```

8. Switch to the main branch.

```
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git checkout master  
Switched to branch 'master'
```

9. Merge the “odd” branch to the current one.

```
Switched to branch 'master'  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git merge odd  
Updating c5d73ae..dcc4d03  
Fast-forward  
 numbers.txt | 1 +  
 1 file changed, 1 insertion(+)
```

10. Try to merge the “even” branch too – it should cause a conflict.

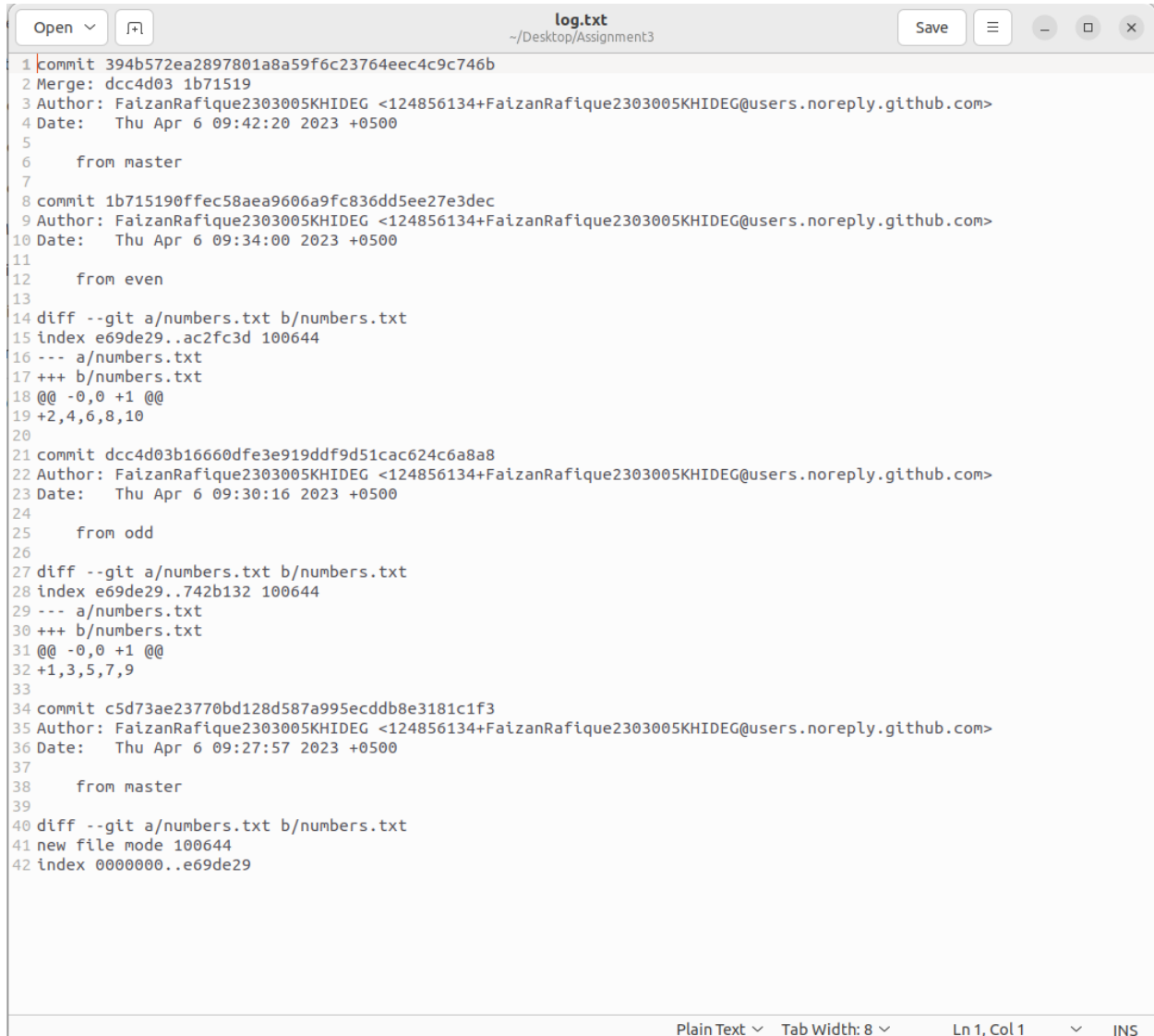
```
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git merge even  
Auto-merging numbers.txt  
CONFLICT (content): Merge conflict in numbers.txt  
Automatic merge failed; fix conflicts and then commit the result.
```

11. Resolve the conflict by combining all the numbers and commit the merge.

```
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ xdg-open numbers.txt  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git add .  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git commit -m "from master"  
[master 394b572] from master  
● muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git merge even  
Already up to date.
```

List the commits using `git log -p` command and save the output in a file.

```
• muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ git log -p >> log.txt
• muhammadfaizanrafique@all-MS-7D35:~/Assignment3$ ls
```



The screenshot shows a text editor window titled "log.txt" with the file path "~/Desktop/Assignment3". The editor contains the output of the `git log -p` command, which lists three commits with their merge information, author details, dates, and file differences. The first commit (394b572ea) merges from master. The second commit (1b715190) merges from even and shows a diff for `a/numbers.txt` and `b/numbers.txt`. The third commit (dcc4d03b) merges from odd and also shows a diff for the same files. The editor interface includes a toolbar with "Open", "Save", and window controls, and a status bar at the bottom showing "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
1 commit 394b572ea2897801a8a59f6c23764eec4c9c746b
2 Merge: dcc4d03 1b71519
3 Author: FaizanRafique2303005KHIDEQ <124856134+FaizanRafique2303005KHIDEQ@users.noreply.github.com>
4 Date: Thu Apr 6 09:42:20 2023 +0500
5
6     from master
7
8 commit 1b715190ffec58aea9606a9fc836dd5ee27e3dec
9 Author: FaizanRafique2303005KHIDEQ <124856134+FaizanRafique2303005KHIDEQ@users.noreply.github.com>
10 Date: Thu Apr 6 09:34:00 2023 +0500
11
12     from even
13
14 diff --git a/numbers.txt b/numbers.txt
15 index e69de29..ac2fc3d 100644
16 --- a/numbers.txt
17 +++ b/numbers.txt
18 @@ -0,0 +1 @@
19 +2,4,6,8,10
20
21 commit dcc4d03b16660dfe3e919ddf9d51cac624c6a8a8
22 Author: FaizanRafique2303005KHIDEQ <124856134+FaizanRafique2303005KHIDEQ@users.noreply.github.com>
23 Date: Thu Apr 6 09:30:16 2023 +0500
24
25     from odd
26
27 diff --git a/numbers.txt b/numbers.txt
28 index e69de29..742b132 100644
29 --- a/numbers.txt
30 +++ b/numbers.txt
31 @@ -0,0 +1 @@
32 +1,3,5,7,9
33
34 commit c5d73ae23770bd128d587a995ecddb8e3181c1f3
35 Author: FaizanRafique2303005KHIDEQ <124856134+FaizanRafique2303005KHIDEQ@users.noreply.github.com>
36 Date: Thu Apr 6 09:27:57 2023 +0500
37
38     from master
39
40 diff --git a/numbers.txt b/numbers.txt
41 new file mode 100644
42 index 0000000..e69de29
```

Plain Text ▾ Tab Width: 8 ▾ Ln 1, Col 1 ▾ INS


```
Activities Visual Studio Code ~ 9:45 6/2/23 Welcome - data_engineering_bootcamp_2303 - Visual Studio Code

File Edit Selection View Go Run Terminal Help
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL COMMENTS
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint: git config --global init.defaultBranch <name>
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint: git branch -m <name>
Initialized empty Git repository in /home/muhammadfaizanrafique/Assignment3/.git/
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ touch numbers.txt
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git commit -m "from master"
[master (root-commit) c5d73ae] from master
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 numbers.txt
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git branch odd
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git branch even
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git checkout odd
Switched to branch 'odd'
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ xdg-open numbers.txt
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git commit -m "from odd"
[odd dcc4d83] from odd
1 file changed, 1 insertion(+)
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git checkout master
Switched to branch 'master'
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git checkout even
Switched to branch 'even'
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ xdg-open numbers.txt
xdg-dbus-proxy xdg-desktop-menu xdg-icon-resource xdg-open xdg-screensaver xdg-settings xdg-user-dirs-gtk-update xdg-user-dirs xdrinfo
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git commit -m "from even"
[even 1b71519] from even
1 file changed, 1 insertion(+)
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git checkout master
Switched to branch 'master'
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git merge odd
Updating c5d73ae..dcc4d83
Fast-forward
 numbers.txt | 1 +
1 file changed, 1 insertion(+)
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git merge even
CONFLICT (content): Merge conflict in numbers.txt
Automatic merge failed; fix conflicts and then commit the result.
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ xdg-open numbers.txt
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git add .
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git commit -m "from master"
[master 394b572] from master
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git merge even
Already up to date.
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ git log -p >> log.txt
muhammadfaizanrafique@all-MS-7035:~/Assignment3$ ls
```

```
Open numbers.txt
~/Assignment3

1 <<<<<<< HEAD
2 1,3,5,7,9
3 =====
4 2,4,6,8,10
5 >>>>>>> even
```

Open ▾



**numbers.txt**  
~/Assignment3

```
1 <<<<<<< HEAD
2 1,3,5,7,9
3 2,4,6,8,10
4 >>>>>>> even
```