UNIT 1.3 GRADED ASSIGNMENT
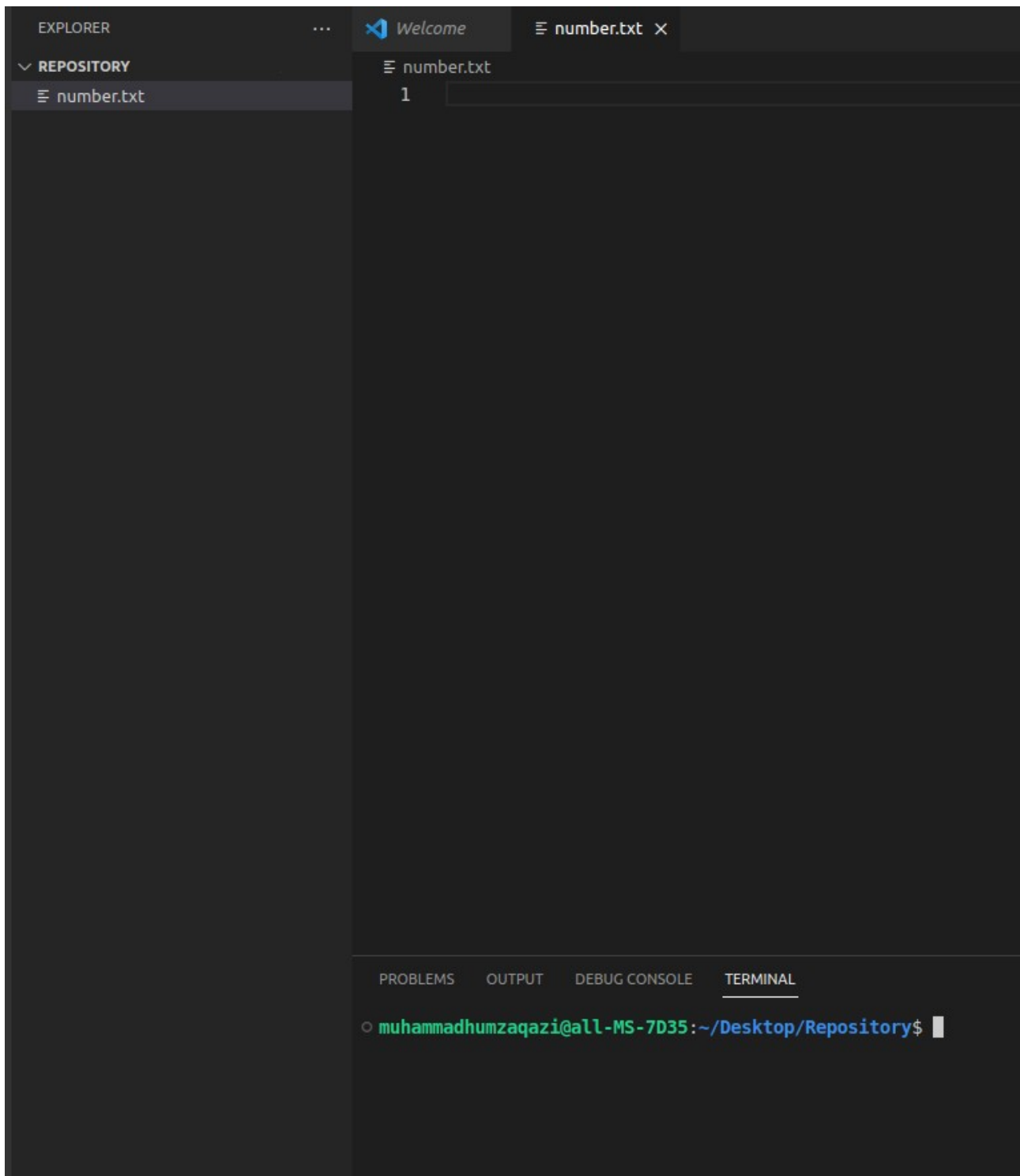
1. Create a new git repository in a local directory.
2. Create an empty file "numbers.txt" and commit it to the current ("main" or "master")
branch.
3. Create two new branches: "odd" and "even".
4. Switch to the "odd" branch.
5. Edit the "numbers.txt" file by adding some odd numbers, then commit the change.
6. Switch to the "even" branch.
7. Edit the "numbers.txt" file by adding some even numbers, then commit the change.
8. Switch to the main branch.
9. Merge the "odd" branch to the current one.
10. Try to merge the "even" branch too – it should cause a conflict.
11. Resolve the conflict by combining all the numbers and commit the merge.
List the commits using `git log -p` command and save the output in a file.
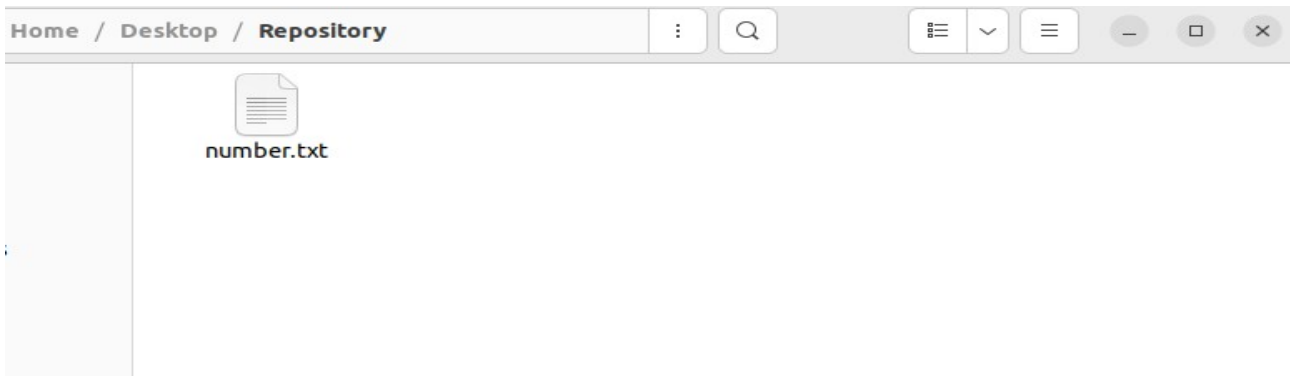
PAIR ASSIGNMENT:
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1. Create a new git repository in a local directory.

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

3. Create two new branches: "odd" and "even".


```
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git commit -m "first commit"
 [master (root-commit) f31d837] first commit
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 number.txt
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git branch odd
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git branch even
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout odd
 Switched to branch 'odd'
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git add .
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git commit -m "odd"
 [odd 30e2e39] odd
  1 file changed, 1 insertion(+)
○ muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$
```

4. Switch to the "odd" branch.
5. Edit the "numbers.txt" file by adding some odd numbers, then commit the
change.

```
 fatal: unable to auto-detect email address (got 'muhammadhumzaqazi@all-MS-7D35.(none)')
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git config --global user.name "humza.qazi@xloopdigital.com"
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git config --global user.email "humza.qazi@xloopdigital.com"
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git config --global user.name "MHumza1731"
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git commit -m "first commit"
 [master (root-commit) f31d837] first commit
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 number.txt
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git branch odd
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git branch even
● muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout odd
 Switched to branch 'odd'
```

6. Switch to the "even" branch.
7. Edit the "numbers.txt" file by adding some even numbers, then commit the change.
8. Switch to the main branch.

```
  1 file changed, 3 insertions(+), 1 deletion(-)
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout even
 Switched to branch 'even'
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git add .
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git commit -m "even"
 [even 162f292] even
  1 file changed, 3 insertions(+)
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout main
 error: pathspec 'main' did not match any file(s) known to git
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout master
 Switched to branch 'master'
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$
```

9. Merge the "odd" branch to the current one.

```
number.txt
    Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
 1  <<<<<<< HEAD (Current Change)
 2  1
 3  3
 4  5
 5  =======
 6  2
 7  4
 8  6
 9  >>>>>>> even (Incoming Change)
10
```

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

```
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git checkout master
 Switched to branch 'master'
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git merge odd
 Updating f31d837..e822451
 Fast-forward
  number.txt | 3 +++
  1 file changed, 3 insertions(+)
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git merge even
 Auto-merging number.txt
 CONFLICT (content): Merge conflict in number.txt
 Automatic merge failed; fix conflicts and then commit the result.
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$
```

11. Resolve the conflict by combining all the numbers and commit the merge. List the commits using `git log -p` command and save the output in a file.

```
CONFLICT (content): Merge conflict in number.txt
Automatic merge failed; fix conflicts and then commit the result.
muhammadhumzaqazi@all-MS-7D35:~/Desktop/Repository$ git log -p
commit 70c442b752c46bbecbc7d0085429ba3a0d09ac12 (HEAD -> master)
Merge: e822451 162f292
Author: MHumza1731 <humza.qazi@xloopdigital.com>
Date:   Thu Apr 6 09:24:36 2023 +0500

    Merge branch 'even'

commit 162f292537656e9059812f5b6459d455653491a3 (even)
Author: MHumza1731 <humza.qazi@xloopdigital.com>
Date:   Thu Apr 6 09:23:01 2023 +0500
```

OUTPUT:

number.txt
~/Desktop/Repository

```
1 1
2 3
3 5
4 2
5 4
6 6
```