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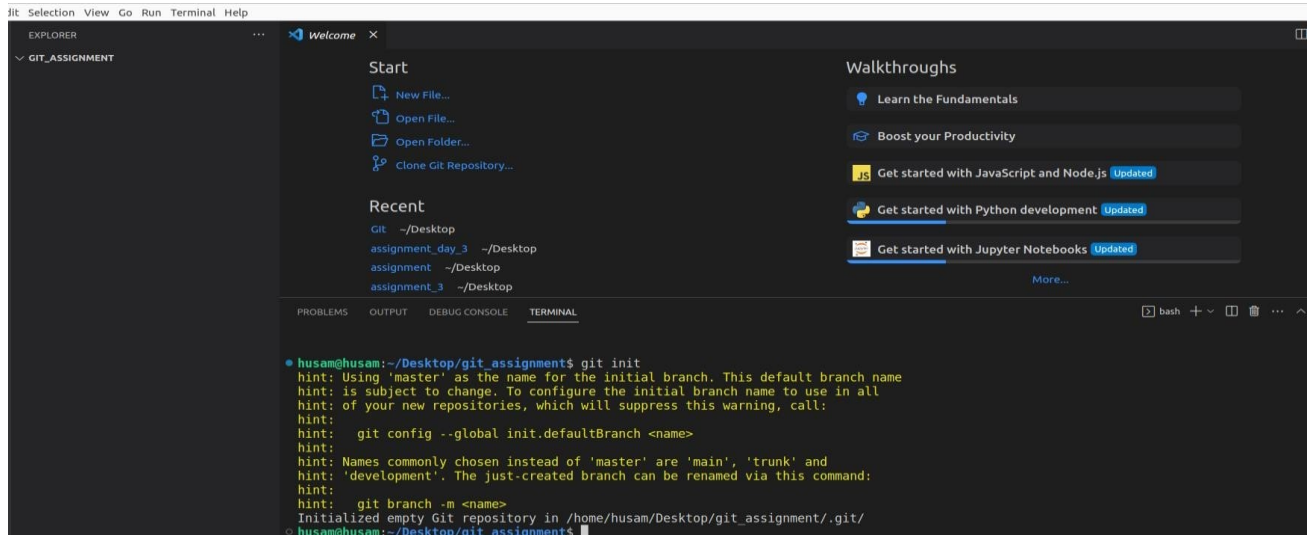
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ASSIGNMENT_Day_3

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.
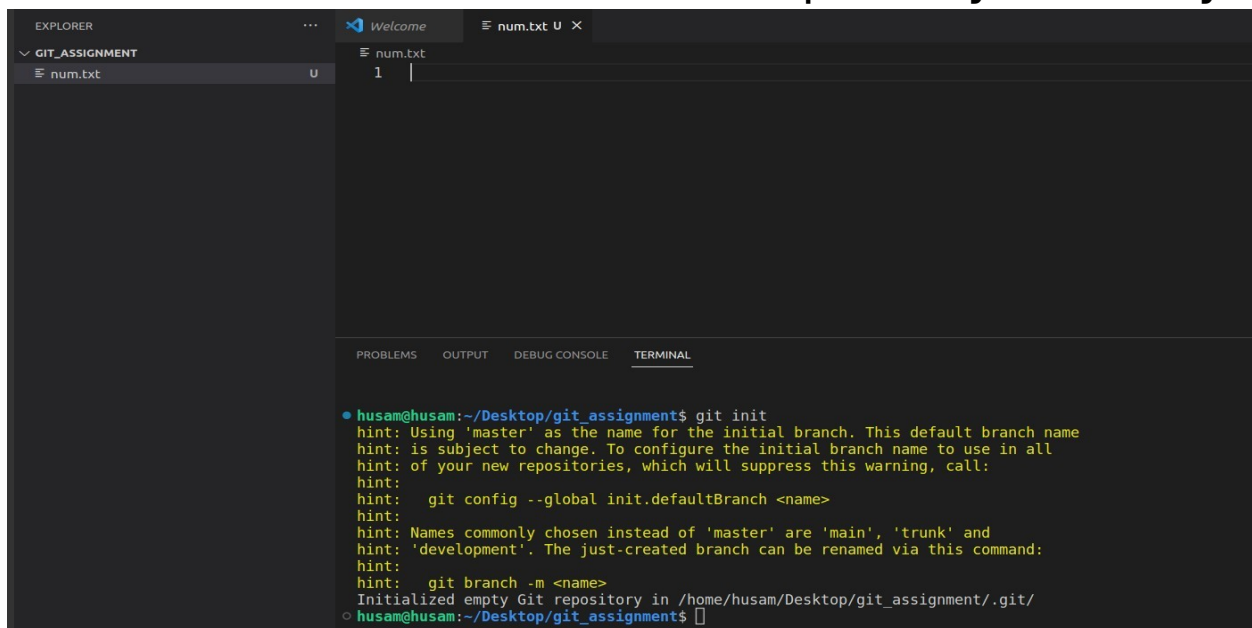
SOLUTION:

1. Use git init command to create a new git repository:

2. num.txt file is created in the repository directory.
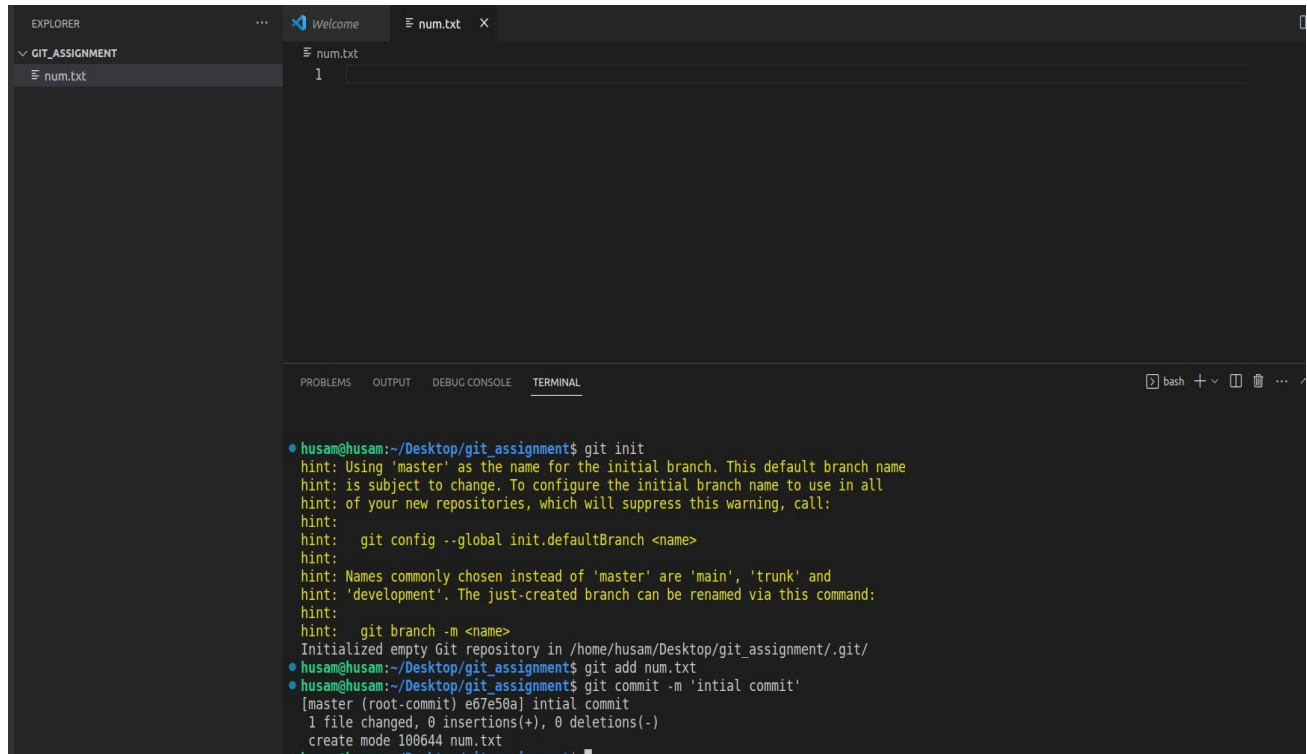
3. Add the file to the repository and commit it to the current branch with the following commands:

git add num.txt

git commit -m "Initial commit"

4.Create two new branches, "odd" and "even," using the following command:

git branch

odd git

branch even

5. Switch to odd branch using ' git checkout odd' and then added odd numbers in num.txt file in odd branch ,after that committed the change as show below in fig:

6. Switch to even branch using ' git checkout even' and then added even numbers in num.txt file in even branch ,after that committed the change as show below in fig:
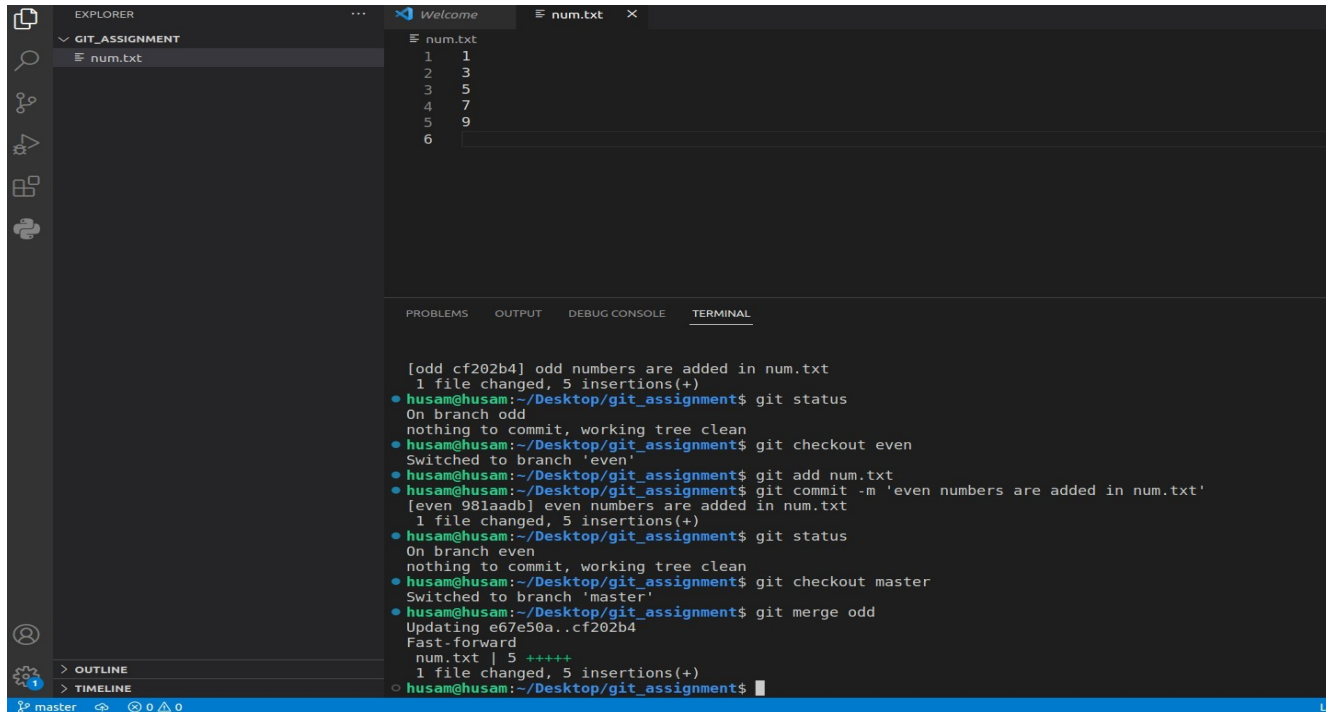
7.We switched to main branch using 'git checkout main'.

8. Merging odd branch with main branch, using ' git merge odd'


```
[odd cf202b4] odd numbers are added in num.txt
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git status
On branch odd
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout even
Switched to branch 'even'
husam@husam:~/Desktop/git_assignment$ git add num.txt
husam@husam:~/Desktop/git_assignment$ git commit -m 'even numbers are added in num.txt'
[even 981aadb] even numbers are added in num.txt
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git status
On branch even
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout master
Switched to branch 'master'
husam@husam:~/Desktop/git_assignment$ git merge odd
Updating e67e50a..cf202b4
Fast-forward
 num.txt | 5 +++++
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$
```

9. Merging even branch with main branch using 'git merge even ' so it will cause conflict.

Screenshot 1 - num.txt with merge conflict:

```
num.txt

Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
1   <<<<<<< HEAD (Current Change)
2   1
3   3
4   5
5   7
6   9
7   =======
8   2
9   4
10  6
11  8
12  10
13  >>>>>>> even (Incoming Change)
14
```

Resolve in Merge Editor

```
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout even
Switched to branch 'even'
husam@husam:~/Desktop/git_assignment$ git add num.txt
husam@husam:~/Desktop/git_assignment$ git commit -m 'even numbers are added in num.txt'
[even 981aadb] even numbers are added in num.txt
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git status
On branch even
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout master
Switched to branch 'master'
husam@husam:~/Desktop/git_assignment$ git merge odd
Updating e67e50a..cf202b4
Fast-forward
 num.txt | 5 +++++
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git merge even
Auto-merging num.txt
CONFLICT (content): Merge conflict in num.txt
Automatic merge failed; fix conflicts and then commit the result.
husam@husam:~/Desktop/git_assignment$
```

Screenshot 2 - Merge Editor:

```
Merging: num.txt
num.txt

Incoming  981aadb • even                          Current  cf202b4 • master, odd
Accept Incoming | Accept Combination (Incoming First) | Ignore    Accept Current | Accept Combination (Current First) | Ignore
1  2                                              1  1
2  4                                              2  3
3  6                                              3  5

Result num.txt                                    1 Conflict Remaining
No Changes Accepted
1
```

Complete Merge

```
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout even
Switched to branch 'even'
husam@husam:~/Desktop/git_assignment$ git add num.txt
husam@husam:~/Desktop/git_assignment$ git commit -m 'even numbers are added in num.txt'
[even 981aadb] even numbers are added in num.txt
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git status
On branch even
nothing to commit, working tree clean
husam@husam:~/Desktop/git_assignment$ git checkout master
Switched to branch 'master'
husam@husam:~/Desktop/git_assignment$ git merge odd
Updating e67e50a..cf202b4
Fast-forward
 num.txt | 5 +++++
 1 file changed, 5 insertions(+)
husam@husam:~/Desktop/git_assignment$ git merge even
Auto-merging num.txt
CONFLICT (content): Merge conflict in num.txt
Automatic merge failed; fix conflicts and then commit the result.
husam@husam:~/Desktop/git_assignment$
```

10. Resolve the conflict by combining all the numbers in the "num.txt" file and commit the merge

11. And finally using git log –p > commits.txt command is used to list commits and create commits.txt file as output.

EXPLORER

GIT_ASSIGNMENT

commits.txt   U
num.txt

num.txt   commits.txt U ✕

commits.txt

```
 1  commit 61d2f40249e1bd69250ee5e20e9510a5d2247a1b
 2  Merge: 7724078 ad4c01a
 3  Author: husam <mohammad.hussam@xloopdigital.com>
 4  Date:   Thu Apr 6 04:03:07 2023 +0500
 5
 6      Resolve conflict: Combine all numbers
 7
 8  commit ad4c01ac6e0a171022ba747660d15eb54ac05b2a
 9  Author: husam <mohammad.hussam@xloopdigital.com>
10  Date:   Thu Apr 6 03:57:37 2023 +0500
11
12      even numbers are added in num.txt
13
14  diff --git a/num.txt b/num.txt
15  index e69de29..0e0333e 100644
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

```
  1 file changed, 5 insertions(+)
 husam@husam:~/Desktop/git_assignment$ git status
 On branch even
 nothing to commit, working tree clean
 husam@husam:~/Desktop/git_assignment$ git checkout master
 Switched to branch 'master'
 husam@husam:~/Desktop/git_assignment$ git merge odd
 Updating 4f68e01..7724078
 Fast-forward
  num.txt | 5 ++++
  1 file changed, 5 insertions(+)
 husam@husam:~/Desktop/git_assignment$ get merge even
 Command 'get' not found, but there are 18 similar ones.
 husam@husam:~/Desktop/git_assignment$ git merge even
 Auto-merging num.txt
 CONFLICT (content): Merge conflict in num.txt
 Automatic merge failed; fix conflicts and then commit the result.
 husam@husam:~/Desktop/git_assignment$ git add num.txt
 husam@husam:~/Desktop/git_assignment$ git commit -m 'Resolve conflict: Combine all numbers'
 [master 61d2f40] Resolve conflict: Combine all numbers
 husam@husam:~/Desktop/git_assignment$ git log -p > commits.txt
 husam@husam:~/Desktop/git_assignment$
```

OUTLINE

TIMELINE

master*

Commit.file:

Open

commits.txt
~/Downloads/git_assignment (2) (1)/git_assignment

```
 1 commit 61d2f40249e1bd69250ee5e20e9510a5d2247a1b
 2 Merge: 7724078 ad4c01a
 3 Author: husam <mohammad.hussam@xloopdigital.com>
 4 Date:   Thu Apr 6 04:03:07 2023 +0500
 5
 6     Resolve conflict: Combine all numbers
 7
 8 commit ad4c01ac6e0a171022ba747660d15eb54ac05b2a
 9 Author: husam <mohammad.hussam@xloopdigital.com>
10 Date:   Thu Apr 6 03:57:37 2023 +0500
11
12     even numbers are added in num.txt
13
14 diff --git a/num.txt b/num.txt
15 index e69de29..0e0333e 100644
16 --- a/num.txt
17 +++ b/num.txt
18 @@ -0,0 +1,5 @@
19 +2
20 +4
21 +6
22 +8
23 +10
24 \ No newline at end of file
25
26 commit 77240789c25a94fda549d65f1a0ad6ffcc2c577d
27 Author: husam <mohammad.hussam@xloopdigital.com>
28 Date:   Thu Apr 6 03:54:28 2023 +0500
29
30     odd numbers are added in num.txt
31
32 diff --git a/num.txt b/num.txt
33 index e69de29..7104f42 100644
34 --- a/num.txt
35 +++ b/num.txt
36 @@ -0,0 +1,5 @@
37 +1
38 +3
39 +5
40 +7
41 +9
42 \ No newline at end of file
43
44 commit 4f68e0178f4771d0e9c2cf4d5c0be67d180f71c5
45 Author: husam <mohammad.hussam@xloopdigital.com>
46 Date:   Thu Apr 6 03:51:18 2023 +0500
47
48     initial commit
49
50 diff --git a/num.txt b/num.txt
51 new file mode 100644
52 index 0000000..e69de29
```