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ASSIGNMNET 1.3

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

```
talhakhan@all-MS-7D35:~/Desktop$ mkdir git2.1
talhakhan@all-MS-7D35:~/Desktop$ cd git2.1
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git init
```

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

```
nothing to commit (create/copy files and use "git add" to track)
talhakhan@all-MS-7D35:~/Desktop/git2.1$ touch numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "1st commit"
[master (root-commit) 8aaf597] 1st commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 numbers.txt
```

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.

```
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git branch odd
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git checkout odd
Switched to branch 'odd'
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "1" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "3" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "5" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add nmbers.txt
fatal: pathspec 'nmbers.txt' did not match any files
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "add even commit"
[odd 21e5d64] add even commit
 1 file changed, 3 insertions(+)
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git branch even
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git checkout even
Switched to branch 'even'
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "2" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "4" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ echo "6" >> numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "add even committ"
[even 4802ac4] add even committ
 1 file changed, 3 insertions(+)
```

8. Switch to the main branch.

```
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git checkout master
Switched to branch 'master'
```

9. Merge the "odd" branch to the current one.
10.   Try to merge the "even" branch too – it should cause a conflict.

```
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git merge odd
Updating 8aaf597..21e5d64
Fast-forward
 numbers.txt | 3 +++
 1 file changed, 3 insertions(+)
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git merge even
Updating 21e5d64..4802ac4
Fast-forward
 numbers.txt | 3 +++
 1 file changed, 3 insertions(+)
```

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

```
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git log -p > git_log.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ ls
git_log.txt  numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "resolved conflict by combing number"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        git_log.txt

nothing added to commit but untracked files present (use "git add" to track)
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add numbers.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "resolved conflict by combing number"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        git_log.txt

nothing added to commit but untracked files present (use "git add" to track)
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git add .
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git commit -m "resolved conflict by combing number"
[master d656b3f] resolved conflict by combing number
 1 file changed, 42 insertions(+)
 create mode 100644 git_log.txt
talhakhan@all-MS-7D35:~/Desktop/git2.1$ 
```

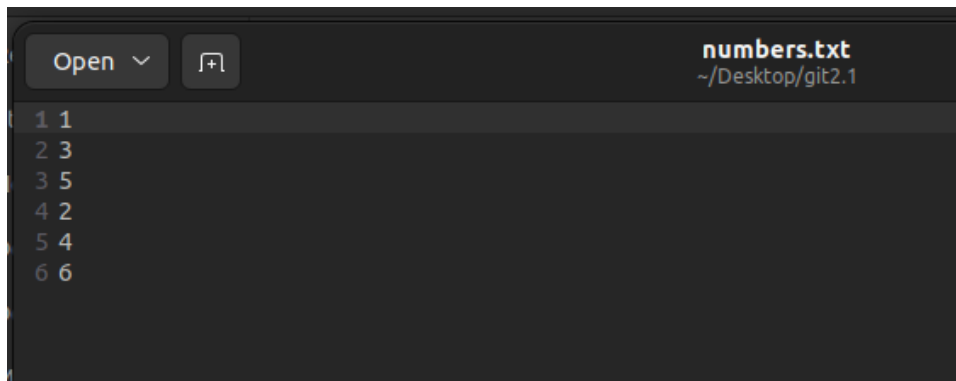List the commits using git log -p command and save the output in a file.

```
talhakhan@all-MS-7D35:~/Desktop/git2.1$ git log -p
commit d656b3facc6174af4f0452b3ccf8010b5a790534 (HEAD -> master)
Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
Date:   Thu Apr 6 09:32:50 2023 +0500

    resolved conflict by combing number

diff --git a/git_log.txt b/git_log.txt
new file mode 100644
index 0000000..0ee0d7e
--- /dev/null
+++ b/git_log.txt
@@ -0,0 +1,42 @@
+commit 4802ac495d1722b23cecc463b6f1a3be3f48efad
+Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
+Date:   Thu Apr 6 09:30:06 2023 +0500
+
+    add even committ
+
+diff --git a/numbers.txt b/numbers.txt
+index 403ec31..e68cccc 100644
+--- a/numbers.txt
++++ b/numbers.txt
+@@ -1,3 +1,6 @@
+ 1
+ 3
+ 5
++2
++4
++6
+
+commit 21e5d6405722232e78ced98f870918b160a8d4bb
+Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
+Date:   Thu Apr 6 09:27:54 2023 +0500
+
+    add even commit
+
+diff --git a/numbers.txt b/numbers.txt
+index e69de29..403ec31 100644
+--- a/numbers.txt
++++ b/numbers.txt
+@@ -0,0 +1,3 @@
++1
++3
++5
+
+commit 8aaf5977a626ad2bb0f2cb374ee61502da277ca4
+Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
+Date:   Thu Apr 6 09:26:33 2023 +0500
+
+    1st commit
+
+diff --git a/numbers.txt b/numbers.txt
+new file mode 100644
+index 0000000..e69de29
:
```

Output:

numbers.txt
~/Desktop/git2.1

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

```
numbers.txt
```

```
 1 commit 4802ac495d1722b23cecc463b6f1a3be3f48efad
 2 Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
 3 Date:    Thu Apr 6 09:30:06 2023 +0500
 4
 5     add even committ
 6
 7 diff --git a/numbers.txt b/numbers.txt
 8 index 403ec31..e68cccc 100644
 9 --- a/numbers.txt
10 +++ b/numbers.txt
11 @@ -1,3 +1,6 @@
12  1
13  3
14  5
15 +2
16 +4
17 +6
18
19 commit 21e5d6405722232e78ced98f870918b160a8d4bb
20 Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
21 Date:    Thu Apr 6 09:27:54 2023 +0500
22
23     add even commit
24
25 diff --git a/numbers.txt b/numbers.txt
26 index e69de29..403ec31 100644
27 --- a/numbers.txt
28 +++ b/numbers.txt
29 @@ -0,0 +1,3 @@
30 +1
31 +3
32 +5
33
34 commit 8aaf5977a626ad2bb0f2cb374ee61502da277ca4
35 Author: Talha-Khan-2303-009-KHI-DEG <talha.khan@xloopdigital.com>
36 Date:    Thu Apr 6 09:26:33 2023 +0500
37
38     1st commit
39
40 diff --git a/numbers.txt b/numbers.txt
41 new file mode 100644
42 index 0000000..e69de29
```