Aqsa Tauheed (2303-KHI-DEG-011)

1.3 Graded Assignment

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

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git config --global user.email "aqsa.tauheed@xloopdigital.com"
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git config --global user.name "Aqsa Tauheed"
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git add .
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git commit -m "numbers.txt added"
[master (root-commit) d2204f9] numbers.txt added
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 numbers
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
* master
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch odd
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
* master
  odd
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch even
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
  even
* master
  odd
```

4.Switch to the "odd" branch.

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git checkout odd
Switched to branch 'odd'
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
  even
  master
* odd
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git status
On branch odd
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:    numbers

no changes added to commit (use "git add" and/or "git commit -a")
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git add .
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git commit -m "add some odd numbers inodd file"
[odd 2715e39] add some odd numbers inodd file
 1 file changed, 1 insertion(+)
```

6.Switch to the "even" branch.

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
* even
  master
  odd
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git checkout even
Switched to branch 'even'
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git add .
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git commit -m "add some even numbers in even file"
[even dc1da3b] add some even numbers in even file
 1 file changed, 1 insertion(+)
```

8.Switch to the main branch.

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git checkout master
Switched to branch 'master'
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git checkout master
Switched to branch 'master'
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git merge odd
Updating d2204f9..2715e39
Fast-forward
 numbers | 1 +
 1 file changed, 1 insertion(+)
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git branch
  even
* master
  odd
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git merge even
Auto-merging numbers
CONFLICT (content): Merge conflict in numbers
Automatic merge failed; fix conflicts and then commit the result.
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git merge even
Auto-merging numbers
CONFLICT (content): Merge conflict in numbers
Automatic merge failed; fix conflicts and then commit the result.
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git commit -m "combining all numbers in one file"
U       numbers
error: Committing is not possible because you have unmerged files.
hint: Fix them up in the work tree, and then use 'git add/rm <file>'
hint: as appropriate to mark resolution and make a commit.
fatal: Exiting because of an unresolved conflict.
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git add .
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git commit -m "combining all numbers in one file"
[master 4ee6b42] combining all numbers in one file
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$
```

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

```
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$ git log -p
commit 4ee6b42c3879bcb6d42722a1d1509f07a6c8f593 (HEAD -> master)
Merge: 2715e39 dc1da3b
Author: Aqsa Tauheed <aqsa.tauheed@xloopdigital.com>
Date:   Thu Apr 6 10:29:50 2023 +0500

    combining all numbers in one file

commit dc1da3b0afd7cd4658282bef0c3fc05aaefff179 (even)
Author: Aqsa Tauheed <aqsa.tauheed@xloopdigital.com>
Date:   Thu Apr 6 10:16:15 2023 +0500

    add some even numbers in even file

diff --git a/numbers b/numbers
index e69de29..2aaea1f 100644
--- a/numbers
+++ b/numbers
@@ -0,0 +1 @@
+2, 4, 6

commit 2715e39617db883f8dba169d0b4c0428820d46c4 (odd)
Author: Aqsa Tauheed <aqsa.tauheed@xloopdigital.com>
Date:   Thu Apr 6 10:13:34 2023 +0500

    add some odd numbers inodd file

diff --git a/numbers b/numbers
index e69de29..7a18941 100644
--- a/numbers
+++ b/numbers
@@ -0,0 +1 @@
+1, 3, 5

commit d2204f9794afb1b6db6765363a077ef7c3697bfd
Author: Aqsa Tauheed <aqsa.tauheed@xloopdigital.com>
Date:   Thu Apr 6 10:06:38 2023 +0500

    numbers.txt added

diff --git a/numbers b/numbers
new file mode 100644
index 0000000..e69de29
aqsatauheed@all-MS-7D35:~/Desktop/Assignment$
```