GRADED ASSIGNMENT (Unit 1.3)

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Employee # : 2303.KHI.DEG.034

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```
hamzaasim@all-MS-7D35:~/.local/share/Trash/files$ cd ~
hamzaasim@all-MS-7D35:~$ git init main
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:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/hamzaasim/main/.git/
hamzaasim@all-MS-7D35:~$ cd main
hamzaasim@all-MS-7D35:~/main$ git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)
hamzaasim@all-MS-7D35:~/main$ touch numbers.txt
hamzaasim@all-MS-7D35:~/main$ git add numbers.txt
hamzaasim@all-MS-7D35:~/main$ git commit -m 'committed empty numbers.txt in master'
Author identity unknown

*** Please tell me who you are.

Run

  git config --global user.email "you@example.com"
  git config --global user.name "Your Name"

to set your account's default identity.
Omit --global to set the identity only in this repository.

hamzaasim@all-MS-7D35:~/main$ git config --global user.email "hamza.asim@xloopdigital.com"
hamzaasim@all-MS-7D35:~/main$ git config --global user.email "hamza.asim@xloopdigital.com"^C
hamzaasim@all-MS-7D35:~/main$   git config --global user.name "Hamza Asim"
hamzaasim@all-MS-7D35:~/main$ git commit -m 'committed empty numbers.txt in master'
[master (root-commit) 61d4e82] committed empty numbers.txt in master
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 numbers.txt
hamzaasim@all-MS-7D35:~/main$ git status
On branch master
nothing to commit, working tree clean
hamzaasim@all-MS-7D35:~/main$ git branch even
hamzaasim@all-MS-7D35:~/main$ git status
```

- initialized git with repo name 'main'
- created a file named 'numbers.txt'
- added the file to main repo
- committed the file with a description of committing an empty file in master
- created a new branch 'even'

```
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
hamzaasim@all-MS-7D35:~/main$ git branch odd
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
  odd
hamzaasim@all-MS-7D35:~/main$ git checkout odd
Switched to branch 'odd'
hamzaasim@all-MS-7D35:~/main$ gedit numbers.txt
hamzaasim@all-MS-7D35:~/main$ git add .
hamzaasim@all-MS-7D35:~/main$
hamzaasim@all-MS-7D35:~/main$ git commit -m 'updated numbers.txt in odd branch'
[odd 8951d54] updated numbers.txt in odd branch
 1 file changed, 1 insertion(+)
hamzaasim@all-MS-7D35:~/main$ git checkout master
Switched to branch 'master'
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
  odd
hamzaasim@all-MS-7D35:~/main$ git checkout even
Switched to branch 'even'
hamzaasim@all-MS-7D35:~/main$ gedit numbers.txt
hamzaasim@all-MS-7D35:~/main$ git add .
hamzaasim@all-MS-7D35:~/main$ git commit -m 'updated numbers.txt in even branch'
[even 8b6799f] updated numbers.txt in even branch
 1 file changed, 1 insertion(+)
hamzaasim@all-MS-7D35:~/main$ git checkout master
Switched to branch 'master'
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
  odd
```

- created a new branch 'odd'
- moved from master to odd
- opened 'numbers.txt' file for editing
- inserted odd numbers and saved the file
- added the updated file to odd branch
- committed the changes to odd branch with description
- switched to even branch
- opened 'numbers.txt' file for editing
- inserted even numbers and saved the file
- added the updated file to even branch
- committed the changes to even branch with description
- switched to master branch

```
odd
hamzaasim@all-MS-7D35:~/main$ git merge odd
Updating 61d4e82..8951d54
Fast-forward
 numbers.txt | 1 +
 1 file changed, 1 insertion(+)
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
  odd
hamzaasim@all-MS-7D35:~/main$ git merge even
Auto-merging numbers.txt
CONFLICT (content): Merge conflict in numbers.txt
Automatic merge failed; fix conflicts and then commit the result.
hamzaasim@all-MS-7D35:~/main$ gedit numbers.txt
hamzaasim@all-MS-7D35:~/main$ git status
On branch master
You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
        both modified:   numbers.txt

no changes added to commit (use "git add" and/or "git commit -a")
hamzaasim@all-MS-7D35:~/main$ git add.
git: 'add.' is not a git command. See 'git --help'.

The most similar command is
        add
hamzaasim@all-MS-7D35:~/main$ git add .
hamzaasim@all-MS-7D35:~/main$ git commit -m 'numbers.txt after resolving conflict manually and being updated'
[master cc612cf] numbers.txt after resolving conflict manually and being updated
hamzaasim@all-MS-7D35:~/main$ git branch
  even
* master
  odd
hamzaasim@all-MS-7D35:~/main$ cat numbers.txt
1,3,5,7,2,4,6,8,10

hamzaasim@all-MS-7D35:~/main$ git checkout even
Switched to branch 'even'
hamzaasim@all-MS-7D35:~/main$ cat numbers.txt
2,4,6,8,10
hamzaasim@all-MS-7D35:~/main$ git checkout odd
Switched to branch 'odd'
hamzaasim@all-MS-7D35:~/main$ cat numbers.txt
1,3,5,7
```

- merged odd branch with master branch
- attempted to merge even branch with master branch
- conflict arises because of changes being made in the master branch and we're trying to merge it with even branch (which itself did the work on the unchanged master branch)
- Opened the numbers.txt file in master branch, and manually edited the changes
- added the changed file
- committed the changed file with message
- Checked each branch's file for clarification/verification of our results

```
hamzaasim@all-MS-7D35:~/main$ cat numbers.txt
1,3,5,7
hamzaasim@all-MS-7D35:~/main$ git log -p >> log.txt
hamzaasim@all-MS-7D35:~/main$ ls
log.txt  numbers.txt
hamzaasim@all-MS-7D35:~/main$ cat log.txt
commit 8951d5413eaa0ffec71e6740f6a383cb9068e6d8
Author: Hamza Asim <hamza.asim@xloopdigital.com>
Date:   Thu Apr 6 09:12:27 2023 +0500

    updated numbers.txt in odd branch

diff --git a/numbers.txt b/numbers.txt
index e69de29..f87e15b 100644
--- a/numbers.txt
+++ b/numbers.txt
@@ -0,0 +1 @@
+1,3,5,7

commit 61d4e82c8b879d94dea2072256f6eef99881c726
Author: Hamza Asim <hamza.asim@xloopdigital.com>
Date:   Thu Apr 6 09:05:14 2023 +0500

    committed empty numbers.txt in master

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

- Created log file with 'git log' and stored its result in a new txt file called 'log.txt'
- The log file describes all of the changes and commits we made in our repository.