⭕Task 01:

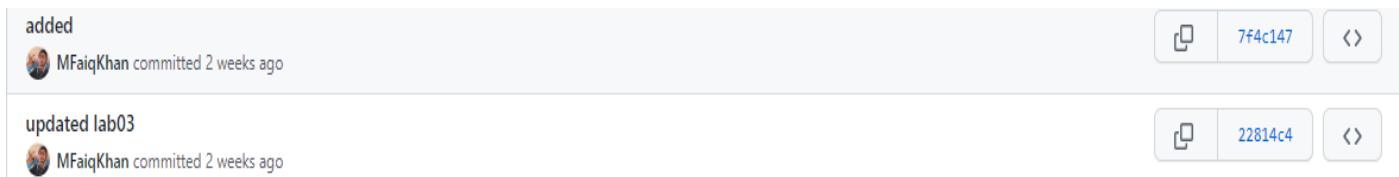## ***Topics : Starting with Git, Branching & Merging in Git***

- Git is a version control system , saves snapshots of every past, current version of your file

E.g:

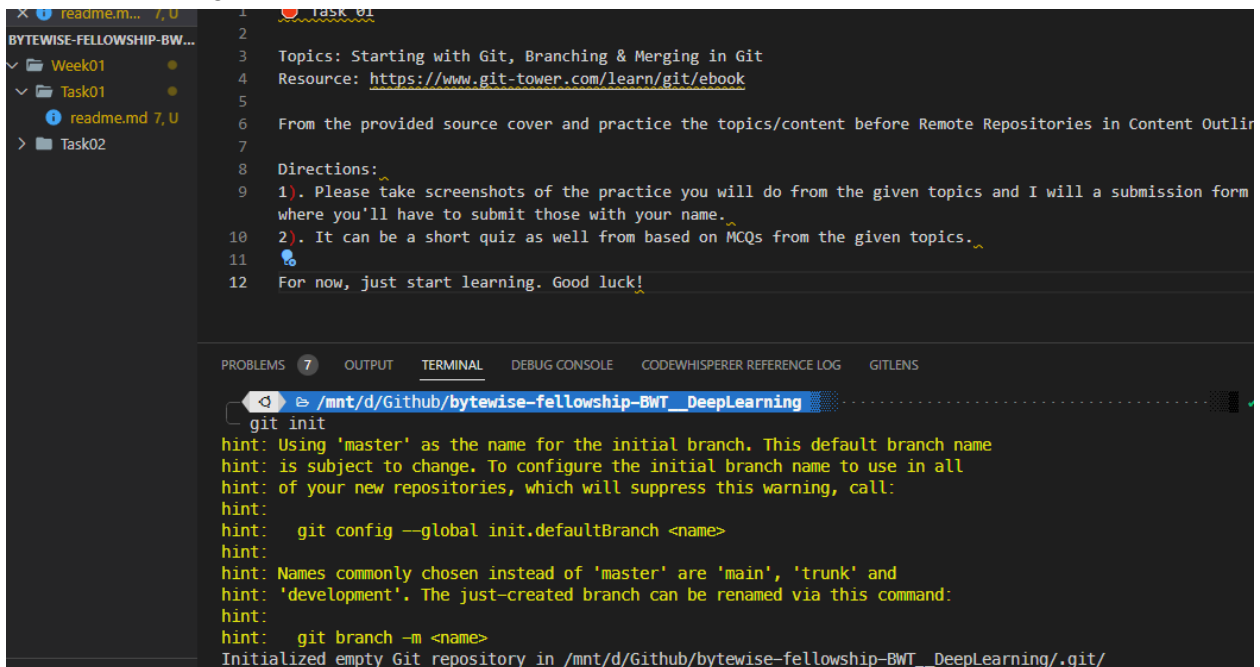Here I have changed and added new file into my repository, My github shows me previous version snapshot commit named "22814c4" and my current commit "7f4c147" .

The later is the root commit having no parent while second one is the old commit having root commit as the parent .

It includes my changes at that time .

Here the short description "added" tells the user what exactly was changed in the file, In this context, the description is very vague but I actually added a .py file in the repository project.
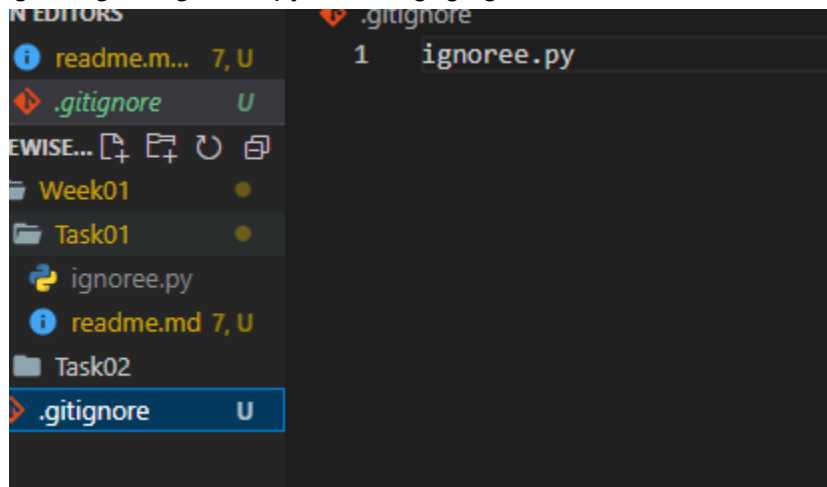——

- Initializing a repo:

- .git folder using ls -la command

```
ls -la
tal 0
wxrwxrwx 1 faiq faiq 512 Mar 15 19:16 .
wxrwxrwx 1 faiq faiq 512 Mar 15 18:30 ..
wxrwxrwx 1 faiq faiq 512 Mar 15 19:16 .git
wxrwxrwx 1 faiq faiq 512 Mar 15 18:40 Week01

    /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning    on git  master ?1
```

- Ignoring the ignored.py file using .gitignore

```
N EDITORS                    .gitignore
 i  readme.m...  7, U         1     ignoree.py
    .gitignore      U
EWISE...
  Week01              ●
  Task01              ●
    ignoree.py
   i  readme.md 7, U
  Task02
  .gitignore          U
```

- Committing the file:

```
    /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning    on git  mas
 git add -A

    /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning    on git  mas
 git commit -m "task01 "
aster (root-commit) 1669e37] task01
 files changed, 13 insertions(+)
reate mode 100644 .gitignore
reate mode 100644 Week01/Task01/readme.md

    /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning    on git  mas
```

- Checking status through git status :

- Seeing project commit history through git log command

- Git log -p (detailed logs)

- Git branch

```
       contact-form 1669e37 task01
     * master           1669e37 task01
     (END)
```

- Git stash list after git stash command

```
          ◁  ▷ /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning   on git
     stash@{0}: WIP on master: 1669e37 task01
     (END)
```

- Checkout to new branch

```
          ◁  ▷ /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning   on git  maste
        git checkout contact-form
     Switched to branch 'contact-form'

          ◁  ▷ /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning   on git  conta
        git status
     On branch contact-form
     nothing to commit, working tree clean

          ◁  ▷ /mnt/d/Github/bytewise-fellowship-BWT__DeepLearning   on git  conta
```

- Stash applied on new branch only

```
     commit d64f07140df793a30613e1709dbc1a345170b6a2 (HEAD -> contact-form)
     Author: MFaiqKhan
     Date:   Wed Mar 15 20:20:38 2023 +0500

         added stash

     commit 1669e37fd0011f5d40ff757f18d80eabbcb63586 (origin/master, master)
     Author: MFaiqKhan
     Date:   Wed Mar 15 19:34:35 2023 +0500

         task01
     (END)
```

- Lets merged the branch now

```
└ git checkout master
Switched to branch 'master'

  ◁   ▷ /mnt/d/Github/bytewise-fellowship-BWT__DeepLearr
└ git merge contact-form
Updating 1669e37..d64f071
Fast-forward
 Week01/Task01/stash.py | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Week01/Task01/stash.py
```