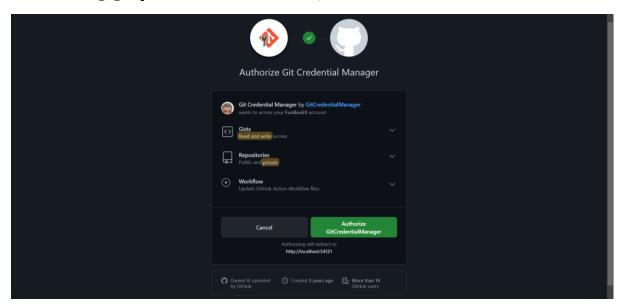
## Part 4 - Push, Pull and Merge

### When using git push for the first time, it asks for authorisation.



#### NOTE:

ON GIT COMMIT

If you have committed a wrong file, you can use the following: -

GIT RESET HARD – To remove changes and commits both.

GIT RESET SOFT – To remove just the commit and keep the changes.

GIT RESTORE – Trackback to last git commit.

### Step 1 - Let's create a branch and merge it with main branch

```
S E:\Demo Git Repo\About-Git-and-GitHub> git merge main
Already up to date.
PS E:\Demo Git Repo\About-Git-and-GitHub> git branch demo-branch
PS E:\Demo Git Repo\About-Git-and-GitHub> git branch
 demo-branch
PS E:\Demo Git Repo\About-Git-and-GitHub> git checkout demo-branch
Switched to branch 'demo-branch'
PS E:\Demo Git Repo\About-Git-and-GitHub> git status
On branch demo-branch
 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)
Untracked files:
  (use "git add <file>..." to include in what will be committed)
no changes added to commit (use "git add" and/or "git commit -a")
PS E:\Demo Git Repo\About-Git-and-GitHub> git add README fatal: pathspec 'README' did not match any files
PS E:\Demo Git Repo\About-Git-and-GitHub> git add README.md
PS E:\Demo Git Repo\About-Git-and-GitHub> git status
On branch demo-branch
 Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
```

# Note: To merge the demo – branch you have to be in Main branch, same goes for deletion of demo-branch.

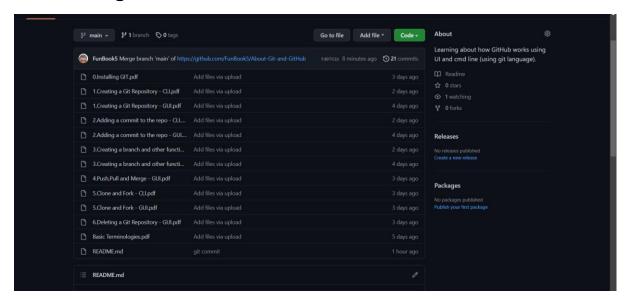
```
PS E:\Demo Git Repo\About-Git-and-GitHub> git branch
 demo-branch
PS E:\Demo Git Repo\About-Git-and-GitHub> git checkout demo-branch
Switched to branch 'demo-branch'
        README.md
PS E:\Demo Git Repo\About-Git-and-GitHub> <mark>git</mark> commit
[demo-branch 9ec5375] git commit
 1 file changed, 1 insertion(+), 1 deletion(-)
PS E:\Demo Git Repo\About-Git-and-GitHub> git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
PS E:\Demo Git Repo\About-Git-and-GitHub> git merge demo-branch
Updating ff24987..9ec5375
 ast-forward
 README.md | 2
1 file changed, 1 insertion(+), 1 deletion(-)
PS E:\Demo Git Repo\About-Git-and-GitHub>
PS E:\Demo Git Repo\About-Git-and-GitHub>
```

# Step 2 — Have to use Git pull before pushing so that your local main schronises with the remote main branch

```
PS E:\Demo Git Repo\About-Git-and-GitHub> <mark>git</mark> push
To https://github.com/FunBook5/About-Git-and-GitHub.git
                                main -> main (fetch first)
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
 PS E:\Demo Git Repo\About-Git-and-GitHub> git pull
 remote: Enumerating objects: 10, done.
 remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 9 (delta 2), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (9/9), 2.25 MiB | 1.69 MiB/s, done.
From https://github.com/FunBook5/About-Git-and-GitHub
73bae56.bb0103e main -> origin/main
Merge made by the 'ort' strategy.
                                                                              | Bin 2 -> 227669
| Bin 3 -> 412462
| Bin 3 -> 796659
| Bin 3 -> 665069
0.Installing GIT.pdf
1.Creating a Git Repository - CLI.pdf
                                                                                                          bytes
                                                                                                          bytes
 2.Adding a commit to the repo - CLI.pdf
                                                                                                          bytes
 3.Creating a branch and other functions - CLI.pdf | Bin
                                                                                                          bytes
 5.Clone and Fork - CLI.pdf
                                                                                                          bytes
 5 files changed, 0 insertions(+), 0 deletions(-) create mode 100644 0.Installing GIT.pdf
```

```
PS E:\Demo Git Repo\About-Git-and-GitHub> git log -3 commit fd0761bac7d6e52ab515e03f517bd84695d832dc (HEAD -> main)
Merge: 9ec5375 bb0103e
Author: Abhinav Tyagi <abhinavtyagi0059@gmail.com>
Date: Tue Jun 28 11:21:22 2022 +0530
    Merge branch 'main' of https://github.com/FunBook5/About-Git-and-GitHub
commit 9ec5375c818573ae65c164df9f0687891cf9121e (demo-branch)
Author: Abhinav Tyagi <abhinavtyagi0059@gmail.com>
Date: Tue Jun 28 10:43:38 2022 +0530
    git commit
commit bb0103eb9dcbb2328fac59bc99680cd9dc1bf74f (origin/main, origin/HEAD)
Author: Abhinav Tyagi <108066950+FunBook5@users.noreply.github.com>
        Sun Jun 26 12:15:32 2022 +0530
    Add files via upload
PS E:\Demo Git Repo\About-Git-and-GitHub> git push
Enumerating objects: 12, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 8 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (8/8), 848 bytes | 282.00 KiB/s, done.
Total 8 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 3 local objects.
```

### You can see git commit in README.



### **BONUS:** -



