

VCS TASK

1. Establish a new directory, populate it with script files
2. initiate an empty repository on GitHub, convert the local directory into a Git repository, and
3. link it to GitHub for pushing the code into the repository.
4. Perform merge,
5. Rebase,
6. Stash commands in following GitHub repo.

1. I created a directory and created 3 .sh files inside

```
ubuntu@ip-172-31-47-62:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-47-62:~$ mkdir mygitproject
ubuntu@ip-172-31-47-62:~$ ls
mygitproject
ubuntu@ip-172-31-47-62:~$ cd mygitproject/
ubuntu@ip-172-31-47-62:~/mygitproject$ echo '#!/bin/bash
echo "Hello World!"' > hello.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ ls
hello.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ echo '#!/bin/bash
# Simple calculator
read -p "Enter first number: " num1
read -p "Enter second number: " num2
echo "Result: $((($num1 + $num2))"' > calculator.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ ls
calculator.sh hello.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ echo '#!/bin/bash
# File organizer script
echo "Organizing files..." > organizer.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ ls -la
total 20
drwxrwxr-x 2 ubuntu ubuntu 4096 Oct  7 15:55 .
drwxr-x--- 5 ubuntu ubuntu 4096 Oct  7 15:53 ..
-rw-rw-r-- 1 ubuntu ubuntu 139 Oct  7 15:55 calculator.sh
-rw-rw-r-- 1 ubuntu ubuntu  32 Oct  7 15:54 hello.sh
-rw-rw-r-- 1 ubuntu ubuntu  63 Oct  7 15:55 organizer.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ chmod +x *.sh
ubuntu@ip-172-31-47-62:~/mygitproject$ ls -la
total 20
drwxrwxr-x 2 ubuntu ubuntu 4096 Oct  7 15:55 .
drwxr-x--- 5 ubuntu ubuntu 4096 Oct  7 15:53 ..
-rwxrwxr-x 1 ubuntu ubuntu 139 Oct  7 15:55 calculator.sh
-rwxrwxr-x 1 ubuntu ubuntu  32 Oct  7 15:54 hello.sh
-rwxrwxr-x 1 ubuntu ubuntu  63 Oct  7 15:55 organizer.sh
```

2. i converted that local directory into git repository

```
ubuntu@ip-172-31-47-62:~/mygitproject$ git init
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/ubuntu/mygitproject/.git/
ubuntu@ip-172-31-47-62:~/mygitproject$ ls -la
total 24
drwxrwxr-x 3 ubuntu ubuntu 4096 Oct  7 16:03 .
drwxr-x--- 5 ubuntu ubuntu 4096 Oct  7 15:53 ..
drwxrwxr-x 7 ubuntu ubuntu 4096 Oct  7 16:03 .git
-rwxrwxr-x 1 ubuntu ubuntu 139 Oct  7 15:55 calculator.sh
-rwxrwxr-x 1 ubuntu ubuntu  32 Oct  7 15:54 hello.sh
-rwxrwxr-x 1 ubuntu ubuntu  63 Oct  7 15:55 organizer.sh
ubuntu@ip-172-31-47-62:~/mygitproject$
```

3. link it to GitHub for pushing the code into the repository.

```
ubuntu@ip-172-31-47-62:~/mygitproject$ git add .
ubuntu@ip-172-31-47-62:~/mygitproject$ git status
On branch master
```

No commits yet

Changes to be committed:
(use "git rm --cached <file>..." to unstage)
new file: calculator.sh
new file: hello.sh
new file: organizer.sh

```
ubuntu@ip-172-31-47-62:~/mygitproject$
```

```
ubuntu@ip-172-31-47-62:~/mygitproject$ git commit -m "Initial commit with script files"
[master (root-commit) 336044e] Initial commit with script files
Committer: Ubuntu <ubuntu@ip-172-31-47-62.ap-south-1.compute.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
```

You can suppress this message by setting them explicitly. Run the following command and follow the instructions in your editor to edit your configuration file:

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

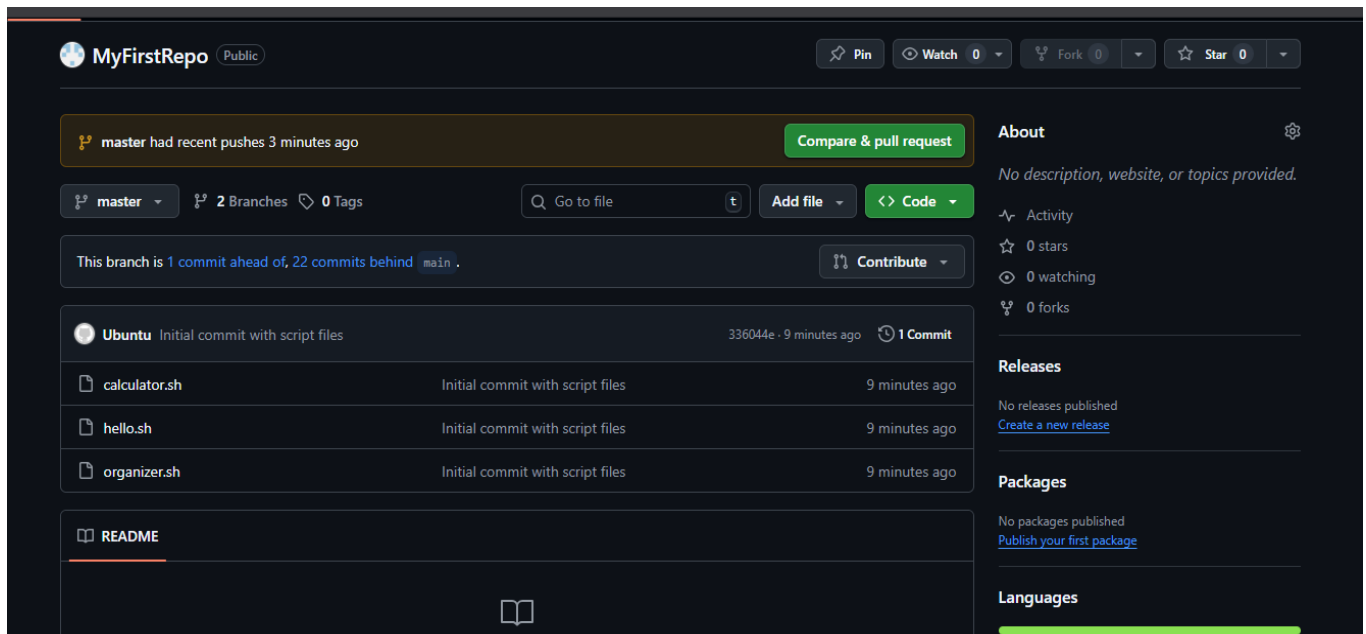
```
git commit --amend --reset-author
```

```
3 files changed, 10 insertions(+)  
create mode 100755 calculator.sh  
create mode 100755 hello.sh  
create mode 100755 organizer.sh  
ubuntu@ip-172-31-47-62:~/mygitproject$
```

```
ubuntu@ip-172-31-47-62:~/mygitproject$ git status  
On branch master  
nothing to commit, working tree clean  
ubuntu@ip-172-31-47-62:~/mygitproject$ git log  
commit 336044e063f677988d1bff5481df19cdf1bee1ea (HEAD -> master)  
Author: Ubuntu <ubuntu@ip-172-31-47-62.ap-south-1.compute.internal>  
Date: Tue Oct 7 16:17:04 2025 +0000
```

Initial commit with script files
ubuntu@ip-172-31-47-62:~/mygitproject\$

```
ubuntu@ip-172-31-47-62:~/mygitproject$ git remote add origin  
https://prabuSR:ghp_peZI9e4h5lOqk0lyPYDxOnsS9mJB7l2hea9X@github.com/  
prabuSR/MyFirstRepo.git  
ubuntu@ip-172-31-47-62:~/mygitproject$ git push -u origin master  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 2 threads  
Compressing objects: 100% (4/4), done.  
Writing objects: 100% (5/5), 524 bytes | 524.00 KiB/s, done.  
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0  
remote:  
remote: Create a pull request for 'master' on GitHub by visiting:  
remote: https://github.com/prabuSR/MyFirstRepo/pull/new/master  
remote:  
To https://github.com/prabuSR/MyFirstRepo.git  
* [new branch] master -> master  
branch 'master' set up to track 'origin/master'.  
ubuntu@ip-172-31-47-62:~/mygitproject$
```



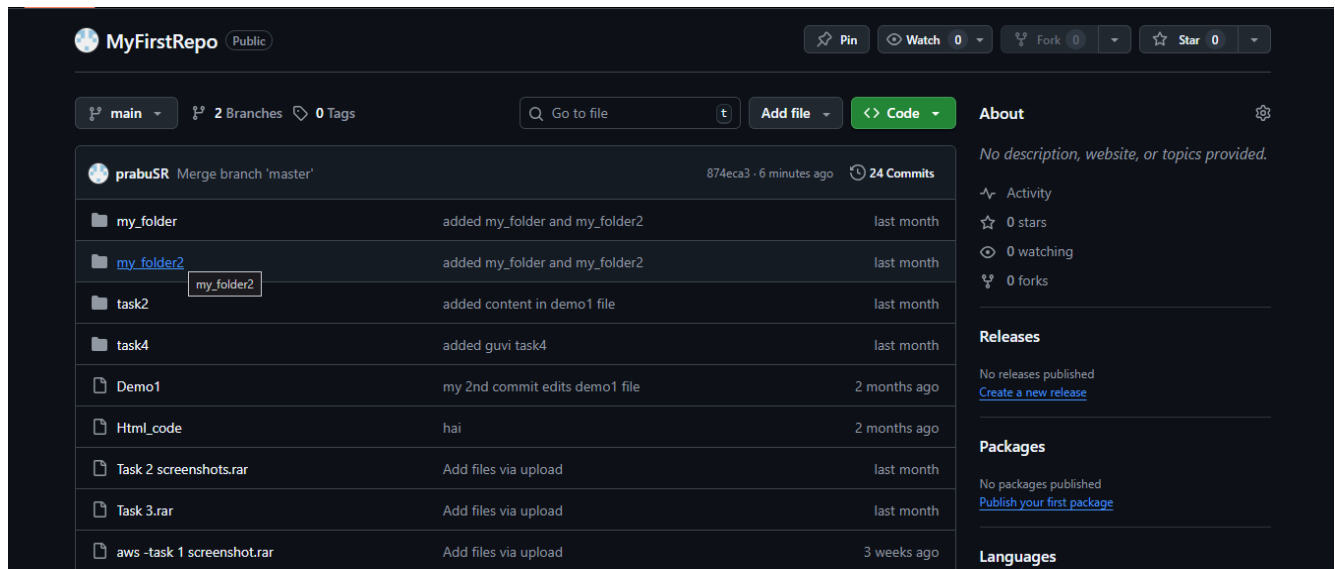
4. i merge master branch with main

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git fetch origin main
remote: Enumerating objects: 73, done.
remote: Counting objects: 100% (73/73), done.
remote: Compressing objects: 100% (59/59), done.
remote: Total 73 (delta 18), reused 27 (delta 4), pack-reused 0 (from 0)
Unpacking objects: 100% (73/73), 10.23 MiB | 11.59 MiB/s, done.
From https://github.com/prabuSR/MyFirstRepo
* branch      main      -> FETCH_HEAD
* [new branch] main      -> origin/main
ubuntu@ip-172-31-39-57:~/mygitproject$ git branch
* master
ubuntu@ip-172-31-39-57:~/mygitproject$ git branch -a
* master
  remotes/origin/main
  remotes/origin/master
ubuntu@ip-172-31-39-57:~/mygitproject$ git switch main
branch 'main' set up to track 'origin/main'.
Switched to a new branch 'main'
ubuntu@ip-172-31-39-57:~/mygitproject$ git branch
* main
  master
ubuntu@ip-172-31-39-57:~/mygitproject$ git merge master
fatal: refusing to merge unrelated histories
ubuntu@ip-172-31-39-57:~/mygitproject$ git merge master --allow-unrelated-
histories
Merge made by the 'ort' strategy.
calculator.sh | 3 +++
```

```

hello.sh      | 3 +++
organizer.sh  | 3 +++
3 files changed, 9 insertions(+)
create mode 100644 calculator.sh
create mode 100644 hello.sh
create mode 100644 organizer.sh
ubuntu@ip-172-31-39-57:~/mygitproject$

```



5. i performed Rebase created new branch feature and rebase with main

```

ubuntu@ip-172-31-39-57:~/mygitproject$ git branch
* feature
  main
ubuntu@ip-172-31-39-57:~/mygitproject$ ls
calculator.sh hello.sh organizer.sh rebase.txt
ubuntu@ip-172-31-39-57:~/mygitproject$ git status
On branch feature
Untracked files:

```

(use "git add <file>..." to include in what will be committed)
rebase.txt

nothing added to commit but untracked files present (use "git add" to track)

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git add .  
ubuntu@ip-172-31-39-57:~/mygitproject$ git status
```

On branch feature

Changes to be committed:

(use "git restore --staged <file>..." to unstage)
new file: rebase.txt

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git commit -m "this my rebase test"
```

[feature a2fc1f9] this my rebase test

1 file changed, 1 insertion(+)

create mode 100644 rebase.txt

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git checkout main
```

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git rebase feature
```

Successfully rebased and updated refs/heads/main.

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git pull --rebase origin main
```

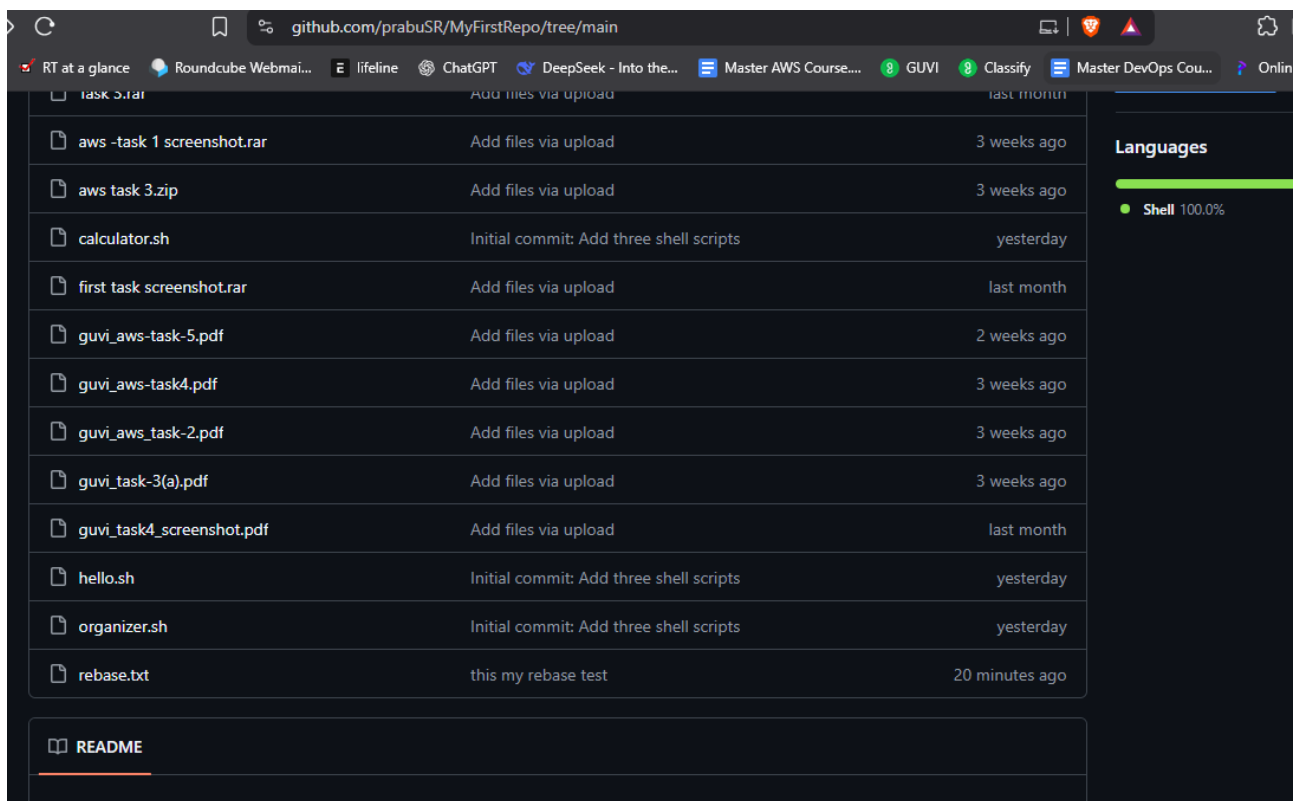
From https://github.com/prabuSR/MyFirstRepo

* branch main -> FETCH_HEAD

warning: skipped previously applied commit f0fc866
warning: skipped previously applied commit 38122a4
warning: skipped previously applied commit 86ecd6d
warning: skipped previously applied commit 809fe6b
warning: skipped previously applied commit 520278c
warning: skipped previously applied commit 280d28e
warning: skipped previously applied commit 9ad7bef
warning: skipped previously applied commit 5c4b38d
warning: skipped previously applied commit 169ba7c
warning: skipped previously applied commit 0433391
warning: skipped previously applied commit 4da6aa0
warning: skipped previously applied commit 373d63c
warning: skipped previously applied commit 6821f52
warning: skipped previously applied commit 01d8d89
warning: skipped previously applied commit f04bbe5
warning: skipped previously applied commit 870bcbd
warning: skipped previously applied commit 8599d2c
warning: skipped previously applied commit 221159a
warning: skipped previously applied commit 8410f1e
warning: skipped previously applied commit 488f07d
warning: skipped previously applied commit ab46f46
warning: skipped previously applied commit c68649e
hint: use --reapply-cherry-picks to include skipped commits

hint: Disable this message with "git config advice.skippedCherryPicks false"
Successfully rebased and updated refs/heads/main.

```
ubuntu@ip-172-31-39-57:~/mygitproject$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 308 bytes | 308.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/prabuSR/MyFirstRepo.git
  874eca3..7231165  main -> main
ubuntu@ip-172-31-39-57:~/mygitproject$
```



6. i performed stash command in master branch

```
ubuntu@ip-172-31-39-57:~/mygitproject$ ls
calculator.sh  hello.sh  organizer.sh
ubuntu@ip-172-31-39-57:~/mygitproject$ git stash list
ubuntu@ip-172-31-39-57:~/mygitproject$ git status
On branch master
Your branch is up to date with 'origin/master'.
```

nothing to commit, working tree clean
ubuntu@ip-172-31-39-57:~/mygitproject\$ echo "hello world" >stash.txt
ubuntu@ip-172-31-39-57:~/mygitproject\$ ls
calculator.sh hello.sh organizer.sh stash.txt
ubuntu@ip-172-31-39-57:~/mygitproject\$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
(use "git add <file>..." to include in what will be committed)
stash.txt

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-39-57:~/mygitproject\$ git stash
No local changes to save
ubuntu@ip-172-31-39-57:~/mygitproject\$ git stash -u
Saved working directory and index state WIP on master: a3cc767 Initial commit:
Add three shell scripts
ubuntu@ip-172-31-39-57:~/mygitproject\$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
ubuntu@ip-172-31-39-57:~/mygitproject\$ git stash list
stash@{0}: WIP on master: a3cc767 Initial commit: Add three shell scripts
ubuntu@ip-172-31-39-57:~/mygitproject\$ git stash pop
Already up to date.
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
(use "git add <file>..." to include in what will be committed)
stash.txt

nothing added to commit but untracked files present (use "git add" to track)
Dropped refs/stash@{0} (fc3e90b4b973f224959247f39ab5cf89b2ebc0e5)
ubuntu@ip-172-31-39-57:~/mygitproject\$