1. Sets the username for Git commits globally. Or display username

```
C:\Users\tallu>git config --global user.name
TNRtn
```

2. Sets the email for Git commits globally. Or display email

C:\Users\tallu>git config --global user.email
tallurinageswarao824@gmail.com

3. Lists all current Git configurations.

```
C:\Users\tallu>git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.email=tallurinageswarao824@gmail.com
user.name=TNRtn
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true
gui.wmstate=zoomed
gui.geometry=1109x563+32+32 216 255
```

4. Initializes a new Git repository.

```
C:\Users\tallu>git init
Reinitialized existing Git repository in C:/Users/tallu/.git/
```

5. Clones an existing repository from a URL.

```
C:\Users\tallu\OneDrive\Documents\morphal>git clone https://github.com/TNRtn/Developers-hub Cloning into 'Developers-hub'...
remote: Enumerating objects: 37, done.
remote: Counting objects: 100% (37/37), done.
remote: Compressing objects: 100% (33/33), done.
remote: Total 37 (delta 3), reused 37 (delta 3), pack-reused 0 (from 0)
Receiving objects: 100% (37/37), 420.93 KiB | 1023.00 KiB/s, done.
Resolving deltas: 100% (3/3), done.
```

- 6. Shows the status of the working directory (staged, modified, and untracked files).
- 7. Shows a history of commits in the current branch.

```
C:\Users\tallu\OneDrive\Documents\morphal>git log
commit f8e8affdbd4730378747036b07226701cc2362df (HEAD -> master, origin/master)
Author: TNRtn <tallurinageswarao824@gmail.com>
Date: Tue Nov 12 11:02:57 2024 +0530

Django project
```

8. Displays commit history in a single line.

```
C:\Users\tallu\OneDrive\Documents\morphal>git log --oneline
f8e8aff (HEAD -> master, origin/master) Django project
```

9. Shows a graphical view of the commit history.

```
C:\Users\tallu\OneDrive\Documents\morphal>git log --graph --decorate --oneline
* f8e8aff (HEAD -> master, origin/master) Django project
```

10. Displays detailed information about a specific commit.

```
C:\Users\tallu\OneDrive\Documents\morphal>git show f8e8affdbdd730378747036b07226701cc2362df
commit f8e3affdbdd730378747036b07226701cc2362df (HEAD -> master, origin/master)

Author: TNRtn <tallurinageswarao2048gmail.com>
Diango project

diff --git a/morphal/db.sqlite3 b/morphal/db.sqlite3
new file mode 1006444
index 0000000.e60de29
diff --git a/morphal/labs/__init__.py b/morphal/labs/__init__.py
new file mode 1006444
index 0000000.e60de29
diff --git a/morphal/labs/__pycache__/__init__.cpython-37.pyc b/morphal/labs/__pycache__/__init__.cpython-37.pyc b/morphal/labs/__pycache__/__init__.cpython-37.pyc differ
diff --git a/morphal/labs/__pycache__/admin.cpython-37.pyc b/morphal/labs/__pycache__/admin.cpython-37.pyc
new file mode 1006444
index 00000000.060fa05e
Binary files /dev/null and b/morphal/labs/__pycache__/admin.cpython-37.pyc differ
diff --git a/morphal/labs/__pycache__/models.cpython-37.pyc b/morphal/labs/__pycache__/models.cpython-37.pyc
new file mode 1006444
index 00000000.060fa05e
Binary files /dev/null and b/morphal/labs/__pycache__/models.cpython-37.pyc differ
diff --git a/morphal/labs/__pycache__/models.cpython-37.pyc differ
diff --git a/morphal/labs/__pycache__/views.cpython-37.pyc b/morphal/labs/__pycache__/views.cpython-37.pyc
new file mode 1006444
index 00000000.8605e0
Binary files /dev/null and b/morphal/labs/__pycache__/views.cpython-37.pyc differ
diff --git a/morphal/labs/__pycache__/views.cpython-37.pyc b/morphal/labs/__pycache__/views.cpython-37.pyc differ
diff --git a/morphal/labs/admin.py b/morphal/labs/__pycache__/views.cpython-37.pyc differ
diff --git a/morphal/labs/admin.py b/morphal/labs/admin.py
00 -0,0 +1,3 00
from diff --git a/morphal/labs/admin.py b/morphal/labs/apps.py b/morphal/labs/apps.py b/morphal/labs/apps.py b/morphal/labs/apps.py b/morphal/labs/apps.py b/morphal/labs/apps.py
new file mode 1006444
```

- 11. Adds a specific file to the staging area. git add <file-name>
- 12. Adds all files (tracked and untracked) to the staging area. git add.
- 13. Adds all JavaScript files to the staging area. git add *.js
- 14. Removes a file from the working directory and staging area. git rm <file-name>
- 15. Removes a file from Git tracking but keeps it locally. git rm --cached <file>
- 16. Renames or moves a file. git mv <old-name> <new-name>
- 17. Restores the file from the last commit (discards changes). git restore <file>
- 18. Unstages a file that was added to the staging area. git restore --staged <file>
- 19. Commits the staged changes with a message. git commit -m "commit message"
- 20. Changes the commit message of the most recent commit.

```
C:\Users\tallu\OneDrive\Documents\morphal>git commit --amend -m "new message"
[master 8f13860] new message
 Date: Tue Nov 12 11:02:57 2024 +0530
 23 files changed, 244 insertions(+)
 create mode 100644 morphal/db.sqlite3
create mode 100644 morphal/labs/__init__.py
create mode 100644 morphal/labs/__pycache__/_init__.cpython-37.pyc
create mode 100644 morphal/labs/__pycache__/admin.cpython-37.pyc
create mode 100644 morphal/labs/__pycache__/models.cpython-37.pyc
create mode 100644 morphal/labs/__pycache__/views.cpython-37.pyc
 create mode 100644 morphal/labs/admin.py
 create mode 100644 morphal/labs/apps.py
 create mode 100644 morphal/labs/migrations/__init__.py
 create mode 100644 morphal/labs/migrations/__pycache__/__init__.cpython-37.pyc
 create mode 100644 morphal/labs/models.py
 create mode 100644 morphal/labs/tests.py
 create mode 100644 morphal/labs/views.py
create mode 100644 morphal/tabs/views.py
create mode 100644 morphal/manage.py
create mode 100644 morphal/morphal/__init__.py
create mode 100644 morphal/morphal/__pycache__/_init__.cpython-37.pyc
create mode 100644 morphal/morphal/__pycache__/settings.cpython-37.pyc
create mode 100644 morphal/morphal/__pycache__/urls.cpython-37.pyc
create mode 100644 morphal/morphal/__pycache__/wsgi.cpython-37.pyc
 create mode 100644 morphal/morphal/asgi.py
 create mode 100644 morphal/morphal/settings.py
 create mode 100644 morphal/morphal/urls.py
 create mode 100644 morphal/morphal/wsgi.py
```

21 Adds all modified files and commits them.

```
C:\Users\tallu\OneDrive\Documents\morphal>git commit -a -m "commit message"
[master 5214b11] commit message
2 files changed, 0 insertions(+), 0 deletions(-)
```

- 22. Commits without changing the previous message.
- 23) Lists all branches in the repository.

```
C:\Users\tallu\OneDrive\Documents\morphal>git branch
* master
```

- 24) Creates a new branch.
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch TNR
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch
 TNR
 - * master
- 25) Deletes a local branch.
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch -d TNR Deleted branch TNR (was 5214b11).
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch
 - * master
- 26) Deletes a local branch (forcefully).
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch -D tnr Deleted branch tnr (was 5214b11).
 - C:\Users\tallu\OneDrive\Documents\morphal>git branch
 * master
- 27) Switches to the specified branch.
 - C:\Users\tallu\OneDrive\Documents\morphal>git checkout tnr
 Switched to branch 'tnr'
- 28) Creates a new branch and switches to it.
 - C:\Users\tallu\OneDrive\Documents\morphal>git checkout -b srm
 Switched to a new branch 'srm'
- 29) Merges another branch into the current branch.
- C:\Users\tallu\OneDrive\Documents\morphal>git merge master
 Already up to date.
- 30) Cancels a conflicted merge.
- C:\Users\tallu\OneDrive\Documents\morphal>git merge --abort fatal: There is no merge to abort (MERGE_HEAD missing).

31) Reapplies commits on top of another base branch.

C:\Users\tallu\OneDrive\Documents\morphal>git rebase tnr Current branch srm is up to date.

32) Stashes uncommitted changes for later use.

C:\Users\tallu\OneDrive\Documents\morphal>git stash
No local changes to save

33). Lists all stashes.

C:\Users\tallu\OneDrive\Documents\morphal>git stash list

34) Applies the latest stash to the working directory.

C:\Users\tallu\OneDrive\Documents\morphal>git stash apply
No stash entries found.

35) Applies a specific stash.

git stash apply stash@{1}

36) Deletes a specific stash.

git stash drop stash@{1}

37) Clears all stashes.

git stash clear

38) Lists the remote URL(s) associated with the repository.

```
C:\Users\tallu\OneDrive\Documents\morphal>git remote -v
origin https://github.com/TNRtn/morphal-labs.git (fetch)
origin https://github.com/TNRtn/morphal-labs.git (push)
```

39) Adds a remote repository named origin.

git remote add origin <url>

40) Removes the remote called origin.

git remote remove origin

41) Shows the details of the remote repository.

```
C:\Users\tallu\OneDrive\Documents\morphal>git remote show origin
* remote origin
Fetch URL: https://github.com/TNRtn/morphal-labs.git
Push URL: https://github.com/TNRtn/morphal-labs.git
HEAD branch: master
Remote branch:
    master tracked
Local branch configured for 'git pull':
    master merges with remote master
Local ref configured for 'git push':
    master pushes to master (local out of date)
```

42) Pushes changes to the remote branch.

git push origin
 sranch-name>

43) Sets the upstream branch and pushes changes.

git push --set-upstream origin
branch-name>

44) Pushes the main branch and sets upstream tracking.

git push -u origin main

45) Pulls changes from the remote branch.

```
C:\Users\tallu\OneDrive\Documents\morphal>git pull origin master
From https://github.com/TNRtn/morphal-labs
 * branch master -> FETCH_HEAD
fatal: refusing to merge unrelated histories
```

46) Downloads commits, files, and refs from a remote repository.

Git fetch

47) Forcefully pushes changes, overwriting remote history.

git push –force

48)