

EXP-1

AIM:-

To perform various GIT operations on local and remote repositories using GIT cheat-sheet

Theory:-

Git add:

Moves changes from the working directory to the staging area. This gives you the opportunity to prepare a snapshot before committing it to the official history.

Git branch:

This command is your general-purpose branch administration tool. It lets you create isolated development environments within a single repository.

Git clone:

Creates a copy of an existing Git repository. Cloning is the most common way for developers to obtain a working copy of a central repository.

Git commit:

Takes the staged snapshot and commits it to the project history. Combined with git add, this defines the basic workflow for all Git users.

git config:

A convenient way to set configuration options for your Git installation. You'll typically only need to use this immediately after installing Git on a new development machine.

git init:

Initializes a new Git repository. If you want to place a project under revision control, this is the first command you need to learn.

git pull:

Pulling is the automated version of git fetch. It downloads a branch from a remote repository, then immediately merges it into the current branch. This is the Git equivalent of svn update.

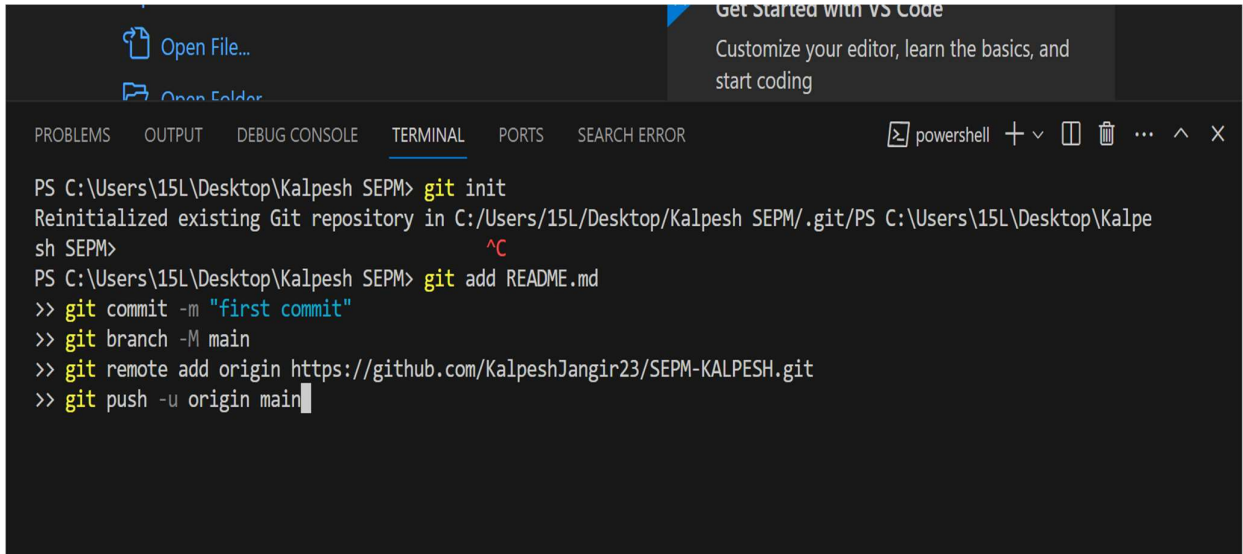
git push:

Pushing is the opposite of fetching (with a few caveats). It lets you move a local branch to another repository, which serves as a convenient way to publish contributions. This is like svn commit, but it sends a series of commits instead of a single changeset.

git status:

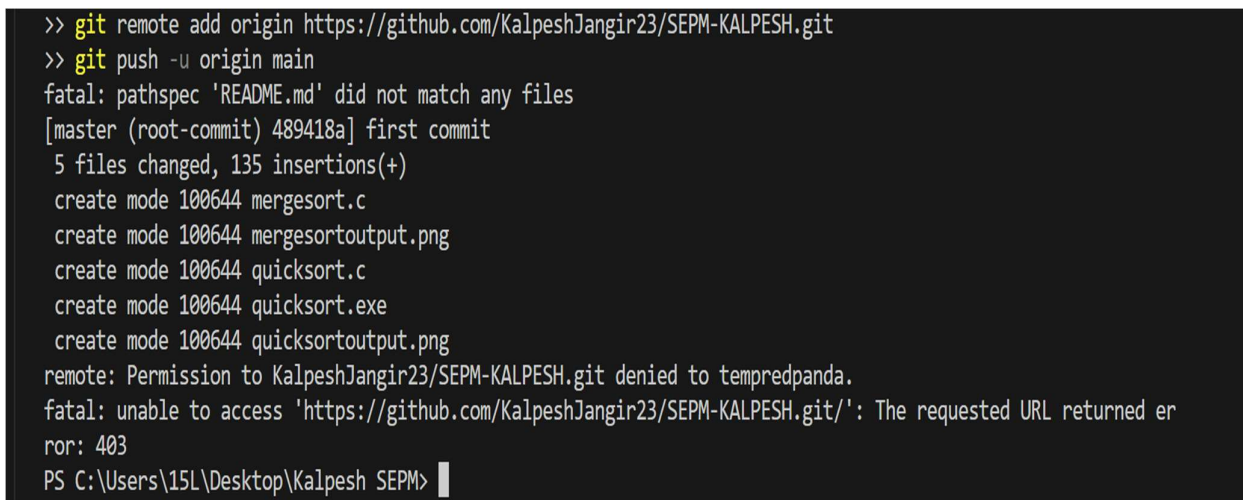
Displays the state of the working directory and the staged snapshot. You'll want to run this in conjunction with git add and git commit to see exactly what's being included in the next snapshot.

Commands



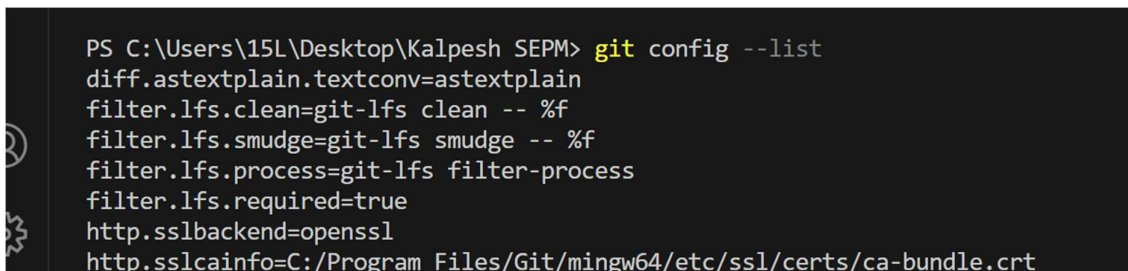
A screenshot of the Visual Studio Code interface. The top bar shows 'Open File...' and 'Open Folder' buttons. The right sidebar has a 'Get Started with VS Code' panel. The main area is a terminal window with the title 'powershell'. The terminal output shows the following commands and their results:

```
PS C:\Users\15L\Desktop\Kalpesh SEPM> git init
Reinitialized existing Git repository in C:/Users/15L/Desktop/Kalpesh SEPM/.git/PS C:\Users\15L\Desktop\Kalpesh SEPM>
PS C:\Users\15L\Desktop\Kalpesh SEPM> git add README.md
>> git commit -m "first commit"
>> git branch -M main
>> git remote add origin https://github.com/KalpeshJangir23/SEPM-KALPESH.git
>> git push -u origin main
```



A screenshot of the Visual Studio Code terminal showing a failed git push. The terminal output is as follows:

```
>> git remote add origin https://github.com/KalpeshJangir23/SEPM-KALPESH.git
>> git push -u origin main
fatal: pathspec 'README.md' did not match any files
[master (root-commit) 489418a] first commit
5 files changed, 135 insertions(+)
create mode 100644 mergesort.c
create mode 100644 mergesortoutput.png
create mode 100644 quicksort.c
create mode 100644 quicksort.exe
create mode 100644 quicksortoutput.png
remote: Permission to KalpeshJangir23/SEPM-KALPESH.git denied to tempredpanda.
fatal: unable to access 'https://github.com/KalpeshJangir23/SEPM-KALPESH.git/': The requested URL returned error: 403
PS C:\Users\15L\Desktop\Kalpesh SEPM>
```



A screenshot of the Visual Studio Code terminal showing the output of the 'git config --list' command. The output is as follows:

```
PS C:\Users\15L\Desktop\Kalpesh SEPM> 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/etc/ssl/certs/ca-bundle.crt
```