Date.....

MAC TERMINAL

mac os termind.

- pwd (print working directory)
- ls → list
- cd (current directory). (folders)
- cd movies
- cd.. (to go to previous directory)
- clear → to clear screen.
  or
  cmd k.
- change back to home directory → cd ~ (tilde)
- touch text_file.txt (create a text file).
- open " (to open).
- history (to show history)
- rm test file.txt (to delete)
- mkdir test_directory (create a new directory) (folder)
- rm -r test " (to delete directory)

Teacher's Sign .....

bash shell

zsh (z-shell)

Date.....

The SHELL (text input interface).

shell is the connector or communicator blw human beings & the machine itself.

GUI
(graphical user interface)

screen you see.
→ user-friendly
→ easy to explore

CLI
(command line interface)

→ access on terminal.
→ time saving
→ more possibilities

- start servers
- download & install tools
- Run code
- execute files

CLI → we have terminal. (text input environment, "hardware").

→ to make hardware work, we need a software, the shell is a software.

Git & GitHub

Date.....

Anuj

Git version control system.

Eg → files ki history store karta hai, that's it.

to check → git --version.

git config --global user.name "nishil-3"

git config --global user.email "email"

git config --list

to change name & email

git config --global --edit

~~esc~~ :

mkdir DSA
cd DSA/

now open same folder in VS code.

git init (folder initialise for git).

~~touch~~ ls -a (to check ban gayi hai).

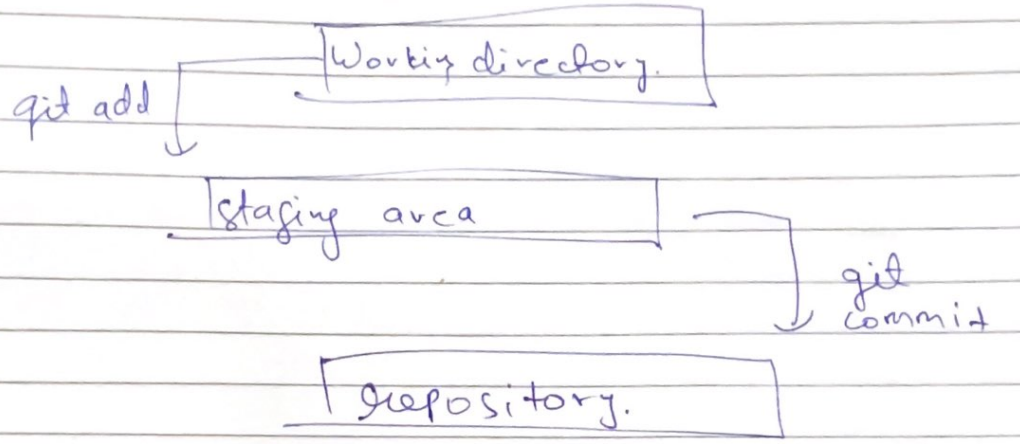
create new file in VS code.

Date.....

git status → gives status

git add name

What is staging area?



git commit -m "message"

git log → to check kitne commits hue hai.

git checkout branch_name (to switch branch)

git checkout -b "_" (to create new branch)

Date.....

Git & Github

Git: Version control system.

Version control system is a tool that help to track changes in code.

→ populer
→ free & open source.
→ fast & scalable.

Why? → to track the history.
→ to collaborate

Github

Website that allows developers to store & manage their code using git.

upload in form of folders called repository.

changes == commit → means is lekar apne memory mei commit karda.

first add then commit

Commit means

↳ engagement → Shaadi

add → ⇆ commit.

Date.....

Git

Git is present in system or in our laptop.

VS code.
Mac (terminal)
Windows (git bash)

~ means we are in system's main directory.

=> configuring git

global — local

overall system.

git config --global user.name "_____"

git config --global user.email "_____"

git config --list

Git commands

clone & status.

remote (Github). local (laptop) Date.....

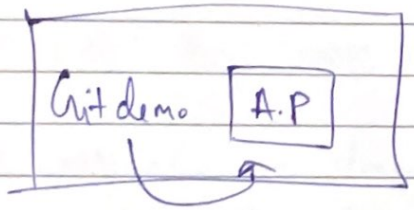
clone - to clone a repo on our local machine.

github ki repo ko system par copy karna.

git clone <- some link ->

clone from https.

cd command → change directory. (folder)



Bahar wale folder se ander wale folder mei jana chahate hai, uo write cd.

~~apna college~~

cd repo name (press tab)

→ % ayega means we are inside that folder.

Eg nikhil@Nikhils-MacBook-Air Second - %

Date.....

(LS)

use ls means list files. jitne hai

ls -a → shows all the hidden files

status command → display the status of the code.

git status.

file to modify karne ke baad we have to perform 2 step process

① → add process

② → Commit process

there are 4 types of git status.

1.) Untracked → new files that git doesn't get track → Eg new file.

2.) Modified - changed.

Date.....

3.) Staged → file is ready to be committed.

4.) unmodified - unchanged

change (modify) / new file (untracked)

↓ add (staged)

↓

commit (unchanged)

ADD AND COMMIT

- add - adds new or changed files in your working directory or to the git staging area.

git add <-file name->

(engagement)

- commit → to record change.

git commit -m "some message"

Date.....

agar bahot saari files hai, simply use

git add .

push Command

push- upload local repo content to remote repo.

git push origin main.

INIT Command

use to create a new git repo.

cd.. → folder par jaye.

mkdir name

↳ new folder created.

Date.....

push karne se phele, we gotta do this

→ git remote add origin <- link ->

→ to check origin kya set hua ->

git remote -v

→ git branch . (to check branch)

→ to change branch name.

git branch -M main

---

git push -u origin main

↳ upstream → creating short form.

---

cd .. → to return to folder

Date.....

Work flow →

local git → github repo.

↓

done

↓

changes

↓

add

↓

commit

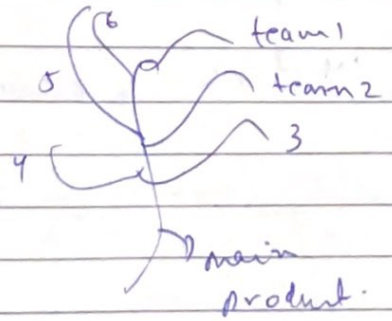
↓

push.

---

git branches.

is like a ~~tree~~ tree.



Date.....

git branch (to check branch)

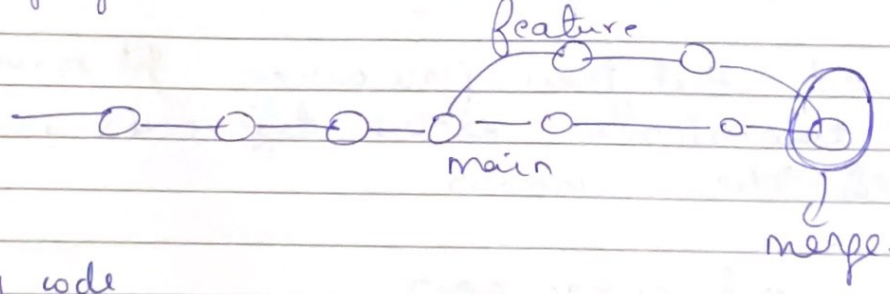
git branch -M main (to rename name)

git checkout <-branch name-> (to ~~ag~~ navigate)

git checkout -b <-bN-> (to create new branch)

git branch -d <BN> (to delete branch)

Merging code.



Merging code

way-1

git diff <-branch name-> (to compare commit, branches & files & more)

git merge <branch name> (merge 2 branch)

way-2

create a PR. (pull request)

Date.....

(Github)

remote ke changes local mei chaiye
(laptop)

↓

Pull command.

→ git pull origin main

used to fetch & download content from a remote repo & immediately update the local repo to match that content.

Resolving merge conflicts.

Event that takes place when git is unable to automatically resolve differences in code b/w 2 commits.

git merge main

---

undoing changes

case 1: staged changes. (add ✓ commit x)

git reset <-filename->

or

git reset.

Date.................

Case 2: commited changes.

git reset HEAD~1

Case 3: commited changes (for many commits)

git ~~reset~~ reset <-commit-hash->

~~hash: git log~~

git reset --hard <hash>

us code pan saare changes show honge

---

fork → to create a rough copy.