Web Development:

Application: Set of instructions given to machine (laptop, mobile, computers) collection programming languages is called application, collection of Applications is called software.

Web: The logic part place in web that is web Application.

Types of Applications:

1.Web Application

2.Mobile Application

3.Desktop Application

Web Application: The application which required internet and browser which runs in web browser.

Mobile Application: The Application which need to download and install is called as Mobile Application which runs in mobile.

Desktop Application: The Application which runs in Desktop.

URL: Stands for Uniform Resource Locator is a reference an address to a web resource to access the resource by entering the URL into a web browser's address bar.

IP: Stands for Internet Protocol, is a unique identifier assigned to each Internet-connected device. It identifies and allows these devices to communicate with each other on an internal or external network.

E.g: https://3.6.190.78//

DNS: Domain Name System translates domain names to numerical IP addresses, allowing users to access resources using easily memorable names.

Domain: A domain is a unique identifier used to access a website.

Ex: "www.amazon.com, " "amazon.com" is the domain name.

Http and Https: HTTP and HTTPS are both protocols used for communication on the web, but they have some key differences.

HTTP stands for Hypertext Transfer Protocol, and it is a protocol used for transmitting hypertext requests and information between servers and browsers. HTTPS, on the other hand, stands for Hypertext Transfer Protocol Secure, and it is an encrypted version of HTTP. This means that data transmitted over HTTPS is secure and encrypted, making it much more difficult for hackers to intercept and access sensitive information.

3-Tire Architecture:
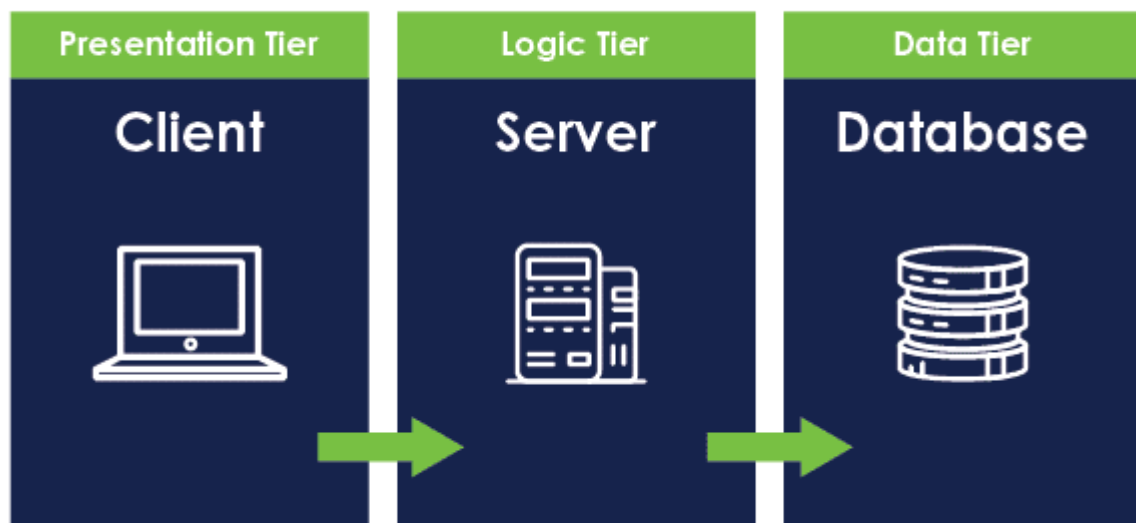
Presentation Tier: involves Front End and clients means user input data

API: Application Programming Interface. which acts as a mediator between programmer and user passing request and response (Client to Server) through internet.

Logic Tier: Involves logical coding which valid data or not.

Data Tier: Which stores the data in data base.

Client: It is frontend Application

Server: It is Backend logical programming.

Data Base: Stores the data in database.

Development of web Application:

1.frontend of web Application is collection of web pages.

2.web pages are the special document which is understand by browser.

3.To develop structure of the web page programmer are using HTML.

4.To decorate web pages programmers are using CSS.

5.To provide actions for web pages make use of JAVA SCRIPT.

HTML:

1.html stands for hypertext mark-up language.

2.Every language have its own representation like java programming have syntax like html represents by using tags.

3.Tags represents by using angular brackets (< >).

4.opening tag→<tag name)

5.closinf tag→</tag name)

1.What is Git?

GIT full form is "Global Information Tracker,"

Git is a DevOps tool used for source code management. It is a free and open-source version control system used to handle small to very large projects efficiently. Git is used to tracking changes in the source code.

2.What is GitHub?

GitHub is an online software development platform. It's used for storing, tracking, and collaborating on software projects. It makes it easy for developers to share code files and collaborate with fellow developers on open-source projects.

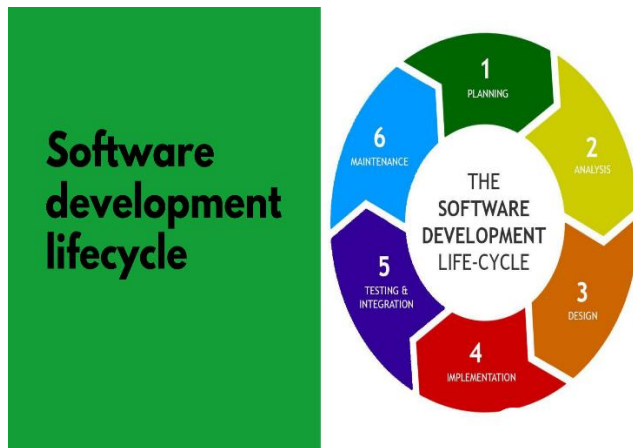## 3.Difference Between GitHub and google drive?

GitHub is a place to share code with friends, co-workers, classmates, and complete strangers, helping individuals and teams.

Google Drive is a cloud storage and backup platform to access files, docs, photos & more, store them in a safe place.

4.What is Jira?

An issue tracking and project management tool for teams.

5.what is SDLC?

6.what is Agile Methodology?

The Agile methodology is a project management approach that involves breaking the project into phases and emphasizes continuous collaboration and improvement. Teams follow a cycle of planning, executing, and evaluating.

7.What is Waterfall Method?

The Waterfall Model is a linear application development model that uses rigid phases: When one phase ends, the next begins. Steps occur in sequence, and, if unmodified, the model does not allow developers to go back to previous steps (hence "waterfall": Once water falls down, it cannot go back up).
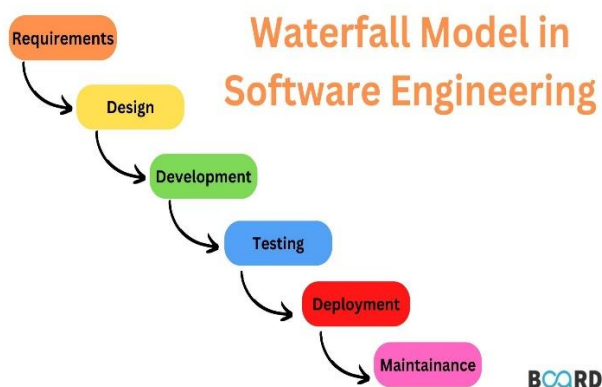
8.What is Deployment?

Software deployment is the process of making software available to be used on a system by users and other programs. You might deploy software to create a backup copy of the software, to move the software to another system, or to create another SMP/E-serviceable copy for installing service or other products.

9.What is Indiabix?

Indiabix Aptitude is an online platform to help people prepare for aptitude tests. It provides a wide selection of questions from many different topics, such as quantitative skills, verbal and logical reasoning, data interpretation and other non-verbal abilities.

10.What is LeetCode?

LeetCode is a tech skills and interview preparation platform students, professional programmers, and employers use to learn, practice, and assess coding and programming skills.

11.What are the Common Thing in All Programming Language?

- BRANCHING. When a computer comes to a point in an algorithm where it has to choose to do one of two (or more) things, we call it branching. ...
- VARIABLES. A variable serves the same purpose in programming languages as in mathematical equations. ...
- DATA TYPES. ...
- DATA STRUCTURE TYPES (ARRAY, OBJECTS, LINKED LISTS)

1.What is Git?

 Git: Global information Tracker/Version Control System

*Git can act as a medium Between your development Environment (Local Repository) and the area where we stored (Remote Repository) is called Git.

*It is a software which we can install in our machine.

*Main use is to Track the changing in our source code.

2.What is GitHub?

*It is a Storage platform which we can store, track and share our projects to multiple people.

* It's used for storing, tracking, and collaborating on software projects. It makes it easy for developers to share code files and collaborate with fellow developers on open-source projects.

3.Git Features:

*git is a distributed version control system widely used for tracking changes in source code during software development. It offers numerous features some key features of git.

1)**Distributed Development**: Multiple developers works on same project concurrently. each developer will have their own branches.

2)**Branching and merging**: Each developer to create separate branches to work on their features or fixes independently after each branch will collaboratively merged with production branch.

3)**Commit Tracking**: Git tracks changes to files through commits each commit includes metadata such as the author and developers to trace the history changes and understand why specific modifications were made.

4)**Staging Area**: it is a file, generally contained in your git directory that stores information about what will go in to your next commit.

5)**Fast Performance**: Git commands that update the index will perform faster.

6)**Security:** It supports various authentication mechanisms the performance in git is more security.

7)**Collaboration Tools**: Git combines with various collaboration tools and platforms such as GitHub, Gitlab, bit bucket which provide additional features like issue tracking pull request code review project management. It enhances team productivity and streamline development flow.

8)**Flexible Workflows**: The workflow of the developers is very easy. Encourage developers and develops teams to influence the situation, so that they control what happens.

9)**Opens Source and Community Support**: Open source which use by one and to communicate the support team.

10)**Customizability**: Customization can be performed by almost anyone from end users to developers to project managers.

11)**Extensibility**: Extensibility on the other hand is concerned with adding new functionality to your environment. coding is most definitely involved in it.

***Command to push local files to remote repository:**

1.git init

2.git clone

3.git add

4.git commit –m "commit anything related"

5.git status

6.cd

7.git branch

8.git checkout branch name

9.ls

10.git pull

11.git push