

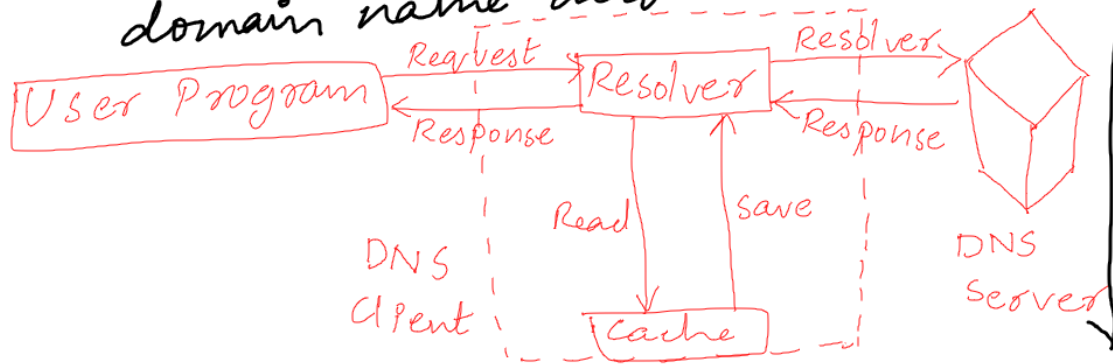
① What is DNS?

- DNS stands for "Domain Name, Service" (or) "Domain Name System".
- It's an application layer protocol.
- The job of DNS is to translate host name to IP Address.



→ DNS Resolution :-

- It's a process of resolving a domain name into an IP address.



Steps of DNS Resolution:-

- S1:- A user program sends query to library procedure called the resolver.
- S2:- Resolver checks whether the host name is available in cache.
- S3:- If the host name is available then it's IP address is given as a response to user.
- S4:- If the name is not found in cache then the host name is given to local DNS server.
- S5:- DNS Server checks whether the host name is available (or) not.
- S6:- If the host name is not available then local DNS server sends a query to higher level DNS server.

S7:- This process is continued until a result is returned.

② E-Mail?

A → It stands for Electronic Mail.
→ It's used for sending messages from source to destination.

E-Mail Architecture & Services:-

→ There are two components of E-mail architecture.

(i) User agents

(ii) Message transfer agents

User agents:- They allow the people to read & send E-mail.
Message transfer agents:- They move the messages from source to destination.

Functions of E-mail -

- (i) Composition:- It's a process of creating & answering messages.
- (ii) Transfer:- It's a process of moving messages from sender to recipient.
- (iii) Reporting:- It tells whether the message was delivered (or) rejected (or) lost.
- (iv) Displaying:- It's a process of displaying the incoming messages.
- (v) Disposition:- It's the activity that's performed by recipient after receiving the message.

Ex:- Throw after reading, Throw before reading, Save message, forward message, etc.

Message format:-

Header Name	Meaning
To:	E-mail address of Primary recipients.
Cc:	E-mail address of secondary recipients.
Bcc:	E-mail address for blind carbon copies.
From:	Person who created the message.
Sender:	E-mail address of the actual sender.
Received:	Line address by each transfer agent along the route.
Return-Path:	Can be used to identify the path back to the sender.

Q) WWW?

- A → It's an application used for accessing content stored on internet.
- WWW is a collection of pages which contains information and links.
- Every page can be a combination of text, picture, audio, video, animation & hyperlink.
- In WWW, we are accessing the web.
- The web is a distributed hypertext system which is implemented as a client-server application.
- It can be designed with HTML, Java Script.
- To access the web we need a special software called web browser.
- To transfer the resources of WWW, we use HTTP (or) HTTPS.
- On the web the location of document is given as URL.

→ URL gives a unique location of document on the web

Ex:- `http://www.google.com`

