

→ Server is a computer program that provides services to other programs or device usually referred as client.

★ for example: When we type a URL into our browser your computer (client) send a request to the server, which process the request & send a response (ex → web page)

What is IP address?

- An Internet protocol address is a unique set of string or unique string of numbers usually separated by dots (IPv4) or colon (IPv6) that identifies a device over a network

→ it is like home address for the device on the internet.

DNS

→ DNS stands for Domain name system that is when you type any string, it translate that human readable domain name (like example.com) into IP address that computer used to identify each other

★ Working

→ An IP play an vital role in the communication b/w the server & client.

1. Client-Server interaction

- ① When a client sends a request by typing a URL into the browser, it needs to locate the server that host the website or service.
- ② Then DNS came into the picture. Like if you type example.com the DNS convert that into a IP address like 93.184.202

2. Routing the Request

- ① The IP address act as an unique address identifier on the server to directly request across the internet to the correct server.

3. Response delivery

- ① The client server process the request & sends back to the client, this is to be maintained using the client IP address.