INTERNET

Address - 12.3.48   121.3.48.16

Computer A   Computer B
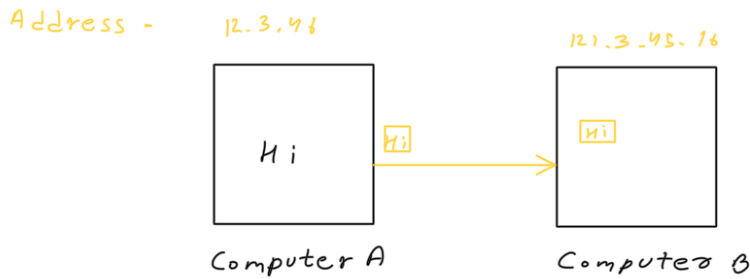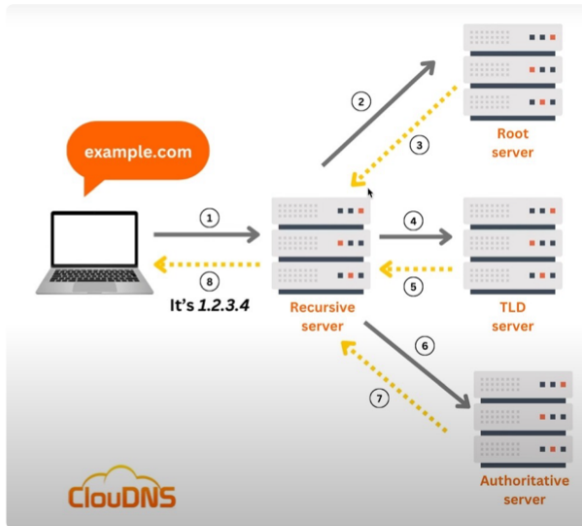
(Dynamic)

IP address - internet protocol address

- kisibhi conversation b/w computer Ke lize IP address lagta hai
- IP address temporary hota hai jo net off Karneke baad hat data hai

IP address is provided by internet service provider (ISP)

DNS - Domain name Server

Converts Domain name to ip address

root server - sa routes request based on entention .in .com .org

TLD Server - Sends to authoritative server
(Top level Domain)

authoritative server - Sends returns IP address

(permanent) MAC Address - mediam access control address [no. of ways in which we can Transfer data]

Request

SIP	SMAC	Anjali Chat	RIP	RMAC

Port number - defines name the requested data to te

Port number   defines   where the requested data to be
Sent in local machine

IPv4: 32 bits

0.0.0.0 $\longrightarrow$ 255.255.255.255

—.—.—.—

$2^{32} = 4,29,49,67,296$ Devices

IPv6: 128 Bit number

$2^{128} = 3.403 \times 10^{38}$ Devices

—:—:—:—:—:—

Port number: 16 bit (unsigned) $2^{16} - 1 =$ total no. of ports

Some Ports are reserved
① well known Port (0 - 1023)
② Registered ports (1024 - 49151)
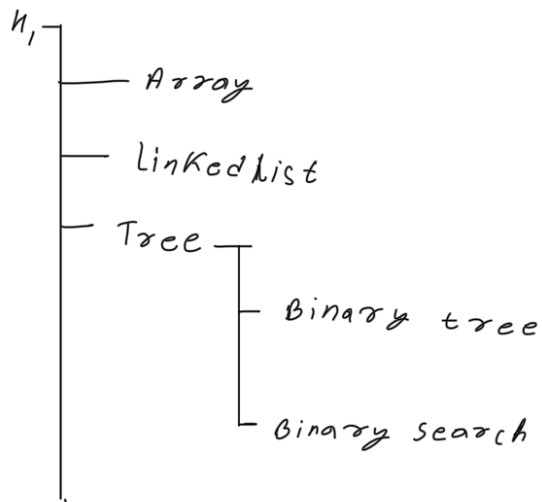③ Dynamic/Private/Ephemeral port (49152 - 65535)

#Cs

HTML

Tags

tags are fundamental elements used to structure and format content on a web page

heading

h_1 ─┐
      ├── Array
      ├── Linked list
      ├── Tree ─┐
      │   ├── Binary tree
      │   └── Binary search

- do not skip head tag

$H_1 \Rightarrow H_2 \Rightarrow H_3 \Rightarrow H_4 \Rightarrow H_5 \Rightarrow H_6$

$$\boxed{<H1> \text{ hello world } </H1>}$$

HTML element

Paragraph $<P>$ $</P>$

to write a paragraph

$<hr>$ - horizontal line

$
$ - break

list

```
<ol>
    <li> Milk </li>
    <li> Sugar </li>
    <li> water </li>
</ol>
```
} Ordered list

```
<ul>
    <li> Milk </li>
    <li> Sugar </li>
    <li> water </li>
</ul>
```
} Unordered list

```
<a href=" google.com"> google </a>    // to create link
```

```
target = "_blank"   // open in new tab
```

```
<img src="img.jpg" height="200 px" weigth="100px"  alt=" image ">
```

TABLE

<table>   </table>   // Table Declaration

<td> </td>   // table data
<tr>   </tr>   // table row
< table border="1">   used for setting border
<tr>
< td> name </td>
<td> roll no. </td>
</tr>
</table>

<th>   </th>   //table header

< theader> </theader> //head of table

<tbody>   </tbody>   // body of table

//footer of table

row span = " "   // how many rows should it contain

col span = " "   //how many coloums should it contain
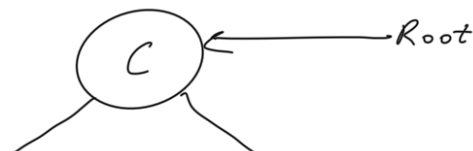
Paths

Windows   (:\ Users] JhonDOc \ Document \ report. docx

Linux   /User/ThonDoe/Documents/report.docx

to go back
        ../

USER   Admin

John   Rohit

Document   Desktop   Download

```
<!Docktype html>

<html lang="en">  // language

<head>
        <meta charset="Utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title> DOC </title>  //give tabname
</head>
<body>


</body>

<html>
```
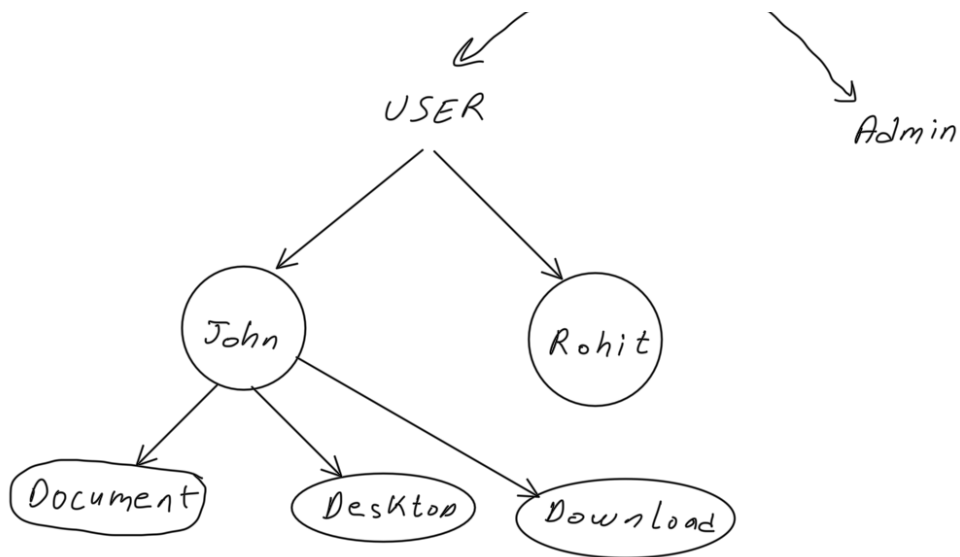
ASCII - 1 byte

UTF-8 - 1,2,3 byte (Flexible)

div

a way to group diffrent elements

```
<div >    </div>   // in between all the elements which are to
                      be grouped?
```

Class

< h1 class = " second ")

↳ Class is an attribute

< h2 id = " second")

↳ id is similar to class and is unique

< header >   < / header> // Declare header

< footer >   </footer> // declare footer

<main> </main>   // declare mainbody

form

most used interactive element of the web

< form> </form>   initialise form

< Label > </label> name of form attribute

< input type = "text") enables taking input

↳ Defines type of input

type

number - take integer as input

password - for password

Submit for submitting form

<input type= "text" name = "Name")- to give a key value bait

Checkbox - select multiple option

name should be same for it to work properly

example :

< label for = "n"> React </label>

<input type = "checkbox" value = "React" name=n id="React">

<br)

< label for = "n"> Node Js </label>

<input type = "checkbox" value = "Node " name ="n" id="Node">

`<br><br>`

`< Select   name = "work"  id = "work">`

    `<option  value = "full-time"> full Time </option>`

    `<option  value = "part-time"> Part Time </option>`

    `<option  value = "Remote "> Remote  </option>`

`< /select >`

Radio buttons

    Only   one of the   option is to be   selected

`< label for = "n"> React </label>`

`<input  type = "Radio " value = "React" name =n  id="React">`

`<br><br>`

`< label for = "n"> Node.Js </label>`

`<input  type = "Radio " value = "Node " name ="n" id="Node">`

`<br><br>`

for creating clickable buttons `<button>` is regardedar

more usefull then input ar button provides more flexibility