

we click enter so it sends a request to the server and server responds back.

### Protocols -

TCP - It will ensure that data will reach its destination and won't be corrupted.

UDP - when we don't care whether our data is reaching or not. for ex - video call

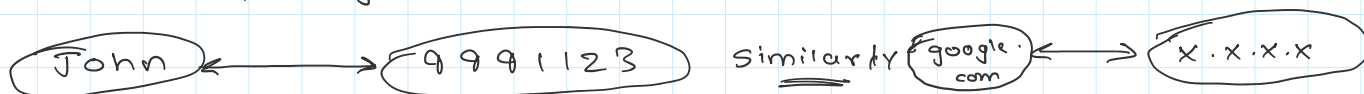
### HTTP - Hyper Text transfer Protocol

It is used by web browser. It defines the format of the data which is being transferred b/w client and servers.

### IP address -

Let's understand this by a phonebook in our mobile.

if we want to call anybody, we don't need to write there number we can find that by typing there names. So,



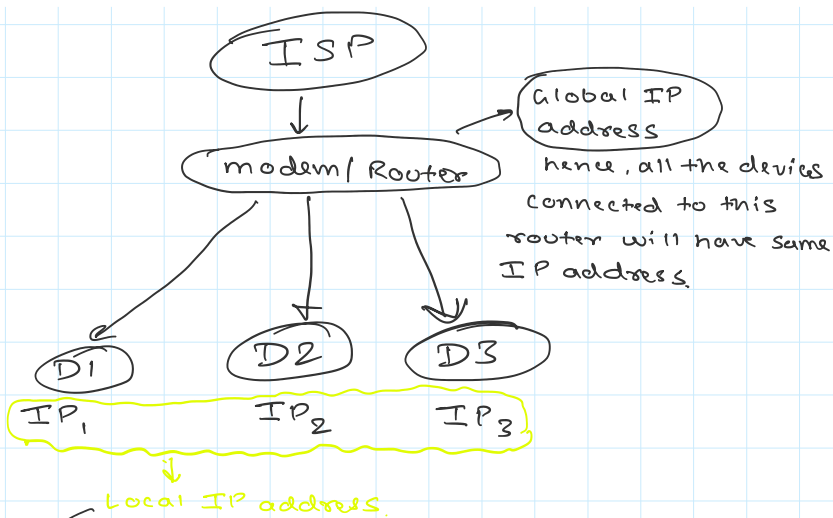
So, every single device on the internet which can talk to each other have an IP address.

### Syntax of an IP address -

$x \cdot x \cdot x \cdot x$   
 every x has  
 a value between  
 0-255

so, If we write a particular IP address, It will resolve to google.com

If we need to check our own IP address use -  
 curl ifconfig.me -s



we do it using **DHCP - Dynamic Host Configuration Protocol**

So, If any of these devices makes a request, Google will see it as a global IP address.

Now, our ISP will send a request to google.com, from where it will response to our ISP. ISP → router. and then using local IP router will send the response to the device who made the request.

it does that using **NAT - Network address translator**

we still don't know which application requested. E.g.

we're using chrome. router knows which device requested but it doesn't know which application from that device requested. So, we can do this using **ports**.

every application in a device has different port number.