# WHAT HAPPENS WHEN YOU TYPE GOOGLE.COM ON YOUR BREOWSER

## WHAT IS A BROWSER

A browser is a local program that run on you local computer eg : google or chrome .It is run to open a window that allows the user to enter a URL .It then translates to the domain name to an IP address so that it can communicate with servers as servers do not communicate with domains

With that a browser is just a program that allows user to enter domain name and later converts to IP Address

# WHAT IS A SERVER

A server is a computer program or a device that provides functionality or services to other programs, devices, or users, known as clients, over a network. Servers can fulfill various roles, such as hosting websites, managing emails, storing files, processing data, or providing access to databases. They typically have more processing power, memory, and storage capacity compared to client devices, allowing them to handle multiple requests efficiently. Servers can be physical machines or virtualized instances running on cloud infrastructure.

## **WHAT ACTUALY HAPPENS**

When you press the search button the browser will translate the domain it into an IP address which is 172.217.3.174. , once translated their will proceed to be an DNS lookup that will be conducted by the OS if filed their will then proceed to be a DNS lookup that will be conducted by the Internet Service Provider(ISP). Your browser will know that is will have to sent packets to the domain name . the HTTPS is the protocol and google.com is the domain . The connection is connected through TCP three way handshake where you browser send to the serve a synchronize message and the server send a synchronize approves and then you browser send an acknowledge connection message. Both sides know that each side exist and are trying to communicate with each other the http connection is now handled by the TCP. So that it when user send a request the serve evaluates it and send back aresponed displaying the request

## THE PROCESS IN DIAGRAM FORM

