Q. What happens when you type facebook.com and enter?

When you type facebook.com and press Enter, the following key steps occur:

DNS Resolution:

The browser looks up the IP address for facebook.com using DNS.

TCP Connection:

The browser establishes a TCP connection to Facebook's server using the obtained IP address via a three-way handshake.

SSL/TLS Handshake:

If the site uses HTTPS, the browser and server perform an SSL/TLS handshake to establish a secure connection.

HTTP Request:

The browser sends an HTTP GET request to Facebook's server for the homepage.

Server Response:

Facebook's server processes the request and sends back the HTML, CSS, JavaScript, and other resources.

Rendering:

The browser parses the HTML, requests additional resources (images, stylesheets, scripts), and renders the page for you to see.

These steps involve network communication, secure connection establishment, and page rendering by the browser.