1.   What is jQuery?

- jQuery is a popular library for JavaScript that simplifies interacting with web pages. It's essentially a toolbox of pre-written code that saves developers time and effort. Here's a breakdown of what jQuery does:

- Simplifies common tasks: jQuery provides a concise way to perform common JavaScript operations like DOM manipulation (changing the structure of your web page), event handling (responding to user interactions), and animations.

- Cross-browser compatibility: One of the biggest advantages of jQuery is that it ensures your code works consistently across different web browsers. Without jQuery, you might need to write extra code to account for these differences.

- Makes AJAX easier: AJAX (Asynchronous JavaScript and XML) allows you to update parts of a web page without reloading the entire thing. jQuery simplifies the process of using AJAX.

- Overall, jQuery allows developers to write cleaner, more efficient JavaScript code that works across different browsers. While it's not essential for every project, it can be a valuable tool for web development.