Q1.DIFFERENCE BETWEEN DOCUMENTS AND WINDOW OBJECTS

In the context of web development, the Document and Window objects are two of the core objects that developers work with. Here are some of the key differences between the two:

1. Scope: The Document object represents the web page content, including the HTML, CSS, and JavaScript code. It is a child object of the Window object, which represents the browser window or tab that the page is loaded in. In other words, the Document object is contained within the Window object.
2. Properties and methods: The Document object provides access to the content of the web page, including its structure, elements, and styles. It has properties and methods for interacting with the document's elements, such as getElementById() and querySelector(). The Window object, on the other hand, provides access to the browser window or tab, including its size, location, and other properties. It has properties and methods for interacting with the browser itself, such as alert() and setTimeout().
3. Lifecycle: The Document object is created when the page is loaded, and it is destroyed when the page is unloaded or the user navigates away from the page. The Window object, on the other hand, is created when the browser is opened and persists as long as the browser window or tab remains open.

Overall, while the Document and Window objects are closely related, they serve different purposes and have different properties and methods. Developers use both objects extensively in web development to create dynamic and interactive web pages.