1. **Write a blog on the Difference between document and window objects?**

**-Document Object:**

The document object represents the HTML document itself. It serves as an entry point to the content of a webpage and provides methods and properties for interacting with the document's elements. Here are some key characteristics of the document object:

**DOM Manipulation:**

The document object allows developers to access and modify the content, structure, and styles of the document. Methods like getElementById, getElementsByClassName, and querySelector enable the retrieval of specific elements for manipulation.

**Content Modification:**

Developers can dynamically change the content of the document using the document object. This includes updating text, attributes, and even adding or removing HTML elements.

**Event Handling:** The document object plays a central role in handling events. Events such as clicks, keypresses, and form submissions are captured and processed through the document object.

**Element Creation:**

The document object allows for the creation of new HTML elements on the fly. Developers can dynamically generate elements and append them to the document using methods like createElement and appendChild.

**-Window Object:**

The window object represents the browser window or frame that contains the document. It serves as the global object in the client-side JavaScript environment and provides a range of functionalities beyond the scope of the document object. Here are some key characteristics of the window object:

**Global Scope:**

Variables and functions declared without the var, let, or const keyword become properties of the window object and are accessible globally. This makes the window object a crucial part of the global scope in JavaScript.

**Navigation and Location:**

The window object is responsible for managing the browser's navigation. The location property, part of the window object, provides information about the current URL and allows for navigation to different URLs.

**Timers and Intervals:**

Functions like setTimeout and setInterval are part of the window object, enabling the execution of code after a specified delay or at regular intervals.

Browser Dimensions and Position: The window object provides information about the browser's dimensions and position on the screen. Properties like innerWidth, innerHeight, outerWidth, and outerHeight help in responsive design and layout calculations.

**Window Methods:**

The window object includes various methods for interacting with the browser, such as alert, confirm, and prompt, which are used for displaying dialogs.

**-Documents vs windows** **objects:**

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| **Document** | **window** |
| It represents any HTML document or web page that is loaded in the browser. | It represents a browser window or frame that displays the contents of the webpage. |
| It is loaded inside the window. | It is the very first object that is loaded in the browser. |
| It is the object of window property. | It is the object of the browser. |
| All the tags, elements with attributes in HTML are part of the document. | Global objects, functions, and variables of JavaScript are members of the window object. |
| We can access the document from a window using the window. document | We can access the window from the window only. i.e. window.window |
| The document is part of BOM (browser object model) and dom (Document object model) | The window is part of BOM, not DOM. |
| Properties of document objects such as title, body, cookies, etc can also be accessed by a window like this window. document.title | Properties of the window object cannot be accessed by the document object. |
| syntax:  document.propertyname; | syntax:  window.propertyname; |
| example:  document.title : will return the title of the document | example:  window.innerHeight : will return the height of the content area of the browser |