**JavaScript - Day -2: Datatypes**

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

**Introduction:**

In the world of web development, the Document and Window objects play crucial roles in manipulating and interacting with web pages. They are part of the Document Object Model (DOM), a programming interface that represents the structure and content of an HTML document. While the Document and Window objects are closely related, they have distinct purposes and characteristics. In this blog, we will delve into the key differences between these two objects and shed light on their unique functionalities.

**Document Object:**

The document object represent a web page that is loaded in the browser. By accessing the document object, we can access the element in the HTML page. With the help of document objects, we can add dynamic content to our web page. The document object can be accessed with a window.document or just document.

**Window Object:**

The window object is the topmost object of the DOM hierarchy. It represents a browser window or frame that displays the contents of the webpage. Whenever a window appears on the screen to display the contents of the document, the window object is created.  It acts as a global object that provides access to various browser-related functionalities, such as controlling the window, navigating to different URLs, and interacting with the user.

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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  The document is part of BOM (browser object model) and dom (Document object model) | We can access the window from the window only. i.e. window.window  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 |

**Conclusion:**

Both the Document and Window objects are integral components of the DOM and play distinct roles in web development. Understanding their differences and functionalities is essential for effective manipulation of web pages and interactions with the user. While the Document object provides access to HTML elements and enables content manipulation, the Window object facilitates browser-related actions and controls. By utilizing the capabilities of these objects appropriately, developers can create dynamic and interactive web experiences.