**DOCUMENT OBJECTS VS WINDOW OBJECTS**

**INTRODUCTION**

In JavaScript, both document and window are important objects that serve different purposes in the context of the browser environment. Here's a detailed explanation of each and their differences:

**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.
* The window object represents the browser's window or tab and is the global object in a browser environment. All global variables, functions, and objects are properties of the window object.
* We can access the window object from the window only .The window is part of BOM, not DOM . Properties of the window object cannot be accessed by the document object.

**SYNTAX:**

window.propertyname;

**Example Properties/Methods:**

window.innerHeight, window.innerWidth: //Dimensions of the viewport.

window.location:// Current URL of the window.

window.alert():// Displays an alert dialog.

**DOCUMENT OBJECT:**

* The document object is a property of the window object (window.document) and represents the HTML or XML content loaded in the window. It serves as the entry point to the web page's content.
* We may access the HTML page element by gaining access to the document object. Document objects allow us to include dynamic material on our webpage. You can use window.document or just document to access the document object. All the tags, elements with attributes in HTML are part of the document.
* Properties of document objects such as title, body, cookies, etc.. can also be accessed by a window like this window. document.title.

**SYNTAX:**

document.propertyname;

**Example Properties/Methods:**

document.getElementById(), document.querySelector(): Methods to select elements.

document.createElement(): Creates new HTML elements.

**KEY DIFFERENCES**

**Scope:**

window: Represents the browser window, providing a global context.

document: Represents the content of the web page within the window.

**Functionality:**

window: Deals with aspects like window size, URL, browser history, etc.

document: Deals with the DOM, enabling manipulation of HTML elements and structure.

**Hierarchy:**

window is the top-level object.

document is a property of window (window.document).