**1. Difference between document & window objects**

The Document and Window objects are two of the most crucial objects in JavaScript and are frequently used in web development. This blog will highlight the key differences between the Document and Window objects.

**Purpose:** The Document object represents the entire HTML document and its contents, including the head and body elements, while the Window object represents the browser window or tab in which the HTML document is displayed.

The Document object allows you to access and manipulate the elements of the HTML document, such as text, images, and links, while the Window object provides access to various properties and methods related to the browser window, such as its size, position, and state.  
  
**Properties**: The Document object provides access to a variety of properties, including the document title, URL, and elements, through its properties and methods. The Window object provides access to properties such as the screen size, the current URL, and the document object.  
  
**Methods:** The Document object provides a range of methods for manipulating the elements of the HTML document, such as document.getElementById() and document.createElement(). The Window object provides methods for manipulating the browser window, such as window.open() and window.close().  
  
**Global Object:** The Window object acts as the global object for all JavaScript code within the window. This means that all global variables and functions are defined as properties of the Window object. As a result, you can access the Document object from any JavaScript code by using the "document" property of the Window object.  
  
**Access:** The Document object is accessible through the "document" property of the Window object. This means that you can access the Document object by writing "window.document" or simply "document".  
  
**Elements:** The Document object provides access to all elements within the HTML document, such as the head and body elements, through the document.elements collection. The Window object provides access to the Window object itself, as well as all other windows and frames within the same window.

**Events:** The Document object provides access to events such as document.onload, which fires when the document has finished loading. The Window object provides access to events such as window.onresize, which fires when the window is resized.

**BOM and DOM:** The Window object is part of the Browser Object Model (BOM), which provides access to various properties and methods related to the browser. The Document object is part of the Document Object Model (DOM), which provides access to the content and structure of the HTML document.  
  
**Document and Window Modes:** The Document object provides access to the document mode, which determines how the document is rendered by the browser. The Window object provides access to the window mode, which determines how the window is displayed by the browser.  
  
**Screen:** The Window object provides access to properties related to the screen, such as screen.width and screen.height. The Document object does not provide direct access to the screen.  
  
**Location:** The Window object provides access to the current URL of the window through the window.location property. The Document object provides access to the document URL through the document.URL property.  
  
**History:** The Window object provides access to the browsing history through the window.history object. The Document object does not provide direct access to the browsing history.  
  
**Storage:** The Window object provides access to local and session storage through the window.localStorage and window.sessionStorage objects. The Document object does not provide direct access to storage.  
  
**Timing:** The Window object provides access to timing methods such as window.setTimeout() and window.setInterval(). The Document object does not provide direct access to timing methods.