**Q4**

**Array**

An array is a JavaScript object that stores multiple values in a single variable. The values can be of any data type, including other arrays, objects, and functions. Arrays are indexed starting from 0, so the first element in an array is at index 0, the second element is at index 1, and so on.

Methods of Array:

1. **push()** - adds one or more elements to the end of an array and returns the new length of the array.

let arr = [1, 2, 3]; arr.push(4, 5); // [1, 2, 3, 4, 5]

1. **pop()** - removes the last element from an array and returns the removed element.

let arr = [1, 2, 3]; arr.pop(); // 3

1. **slice()** - returns a new array containing a portion of an existing array, specified by start and end indexes.

let arr = [1, 2, 3, 4, 5]; let newArr = arr.slice(1, 4); // [2, 3, 4]

1. **sort()** - sorts the elements of an array in place and returns the sorted array.

let arr = [3, 2, 1]; arr.sort(); // [1, 2, 3]

**Document Object**

The Document object represents the web page loaded in the browser window. It provides a way to access and manipulate the contents of the page, such as the HTML elements and their properties.

Methods of Document Object:

1. **getElementById()** - returns the HTML element with the specified ID.

let element = document.getElementById("myElement");

1. **getElementsByClassName()** - returns a collection of HTML elements with the specified class name.

let elements = document.getElementsByClassName("myClass");

1. **querySelector()** - returns the first HTML element that matches a specified CSS selector.

let element = document.querySelector(".myClass");

1. **createElement()** - creates a new HTML element with the specified tag name.

let element = document.createElement("div");