

ASSIGNMENT-6

6. Find the details about following methods of Array:

find(), findIndex(), filter()

- **find() Method:**

- Purpose: The find() method is used to find the first element in an array that satisfies a provided testing function.
- Syntax: array.find(callback(element[, index[, array]]), thisArg)

Parameters:

- callback: A function that defines the test condition. It is invoked with three arguments: element (the current array element), index (the current index), and array (the array on which find() was called).
- thisArg (optional): An object to which the this value within the callback is set.
- Return Value: The find() method returns the first element in the array that satisfies the provided testing function. If no element is found, it returns undefined.

- **findIndex() Method:**

- Purpose: The findIndex() method is used to find the index of the first element in an array that satisfies a provided testing function.
- Syntax: array.findIndex(callback(element[, index[, array]]), thisArg)

Parameters:

- callback: A function that defines the test condition. It is invoked with three arguments: element (the current array element), index (the current index), and array (the array on which findIndex() was called).
- thisArg (optional): An object to which the this value within the callback is set.
- Return Value: The findIndex() method returns the index of the first element in the array that satisfies the provided testing function. If no element is found, it returns -1.

- **filter() Method:**

- Purpose: The filter() method is used to create a new array with all elements that satisfy a provided testing function.
- Syntax: array.filter(callback(element[, index[, array]]), thisArg)
- Parameters:
- callback: A function that defines the test condition. It is invoked with three arguments: element (the current array element), index (the current index), and array (the array on which filter() was called).
- thisArg (optional): An object to which this value within the callback is set.
- Return Value: The filter() method returns a new array containing all elements that satisfy the provided testing function. If no elements match the condition, it returns an empty array.