Experiment #	<TO BE FILLED BY STUDENT>	Student ID	<TO BE FILLED BY STUDENT>
Date	<TO BE FILLED BY STUDENT>	Student Name	<TO BE FILLED BY STUDENT>

Experiment Title: JavaScript Functions: Write function, which returns filtered array based on function, which passed as a parameter

Aim/Objective

To create a JavaScript function that filters an array based on a filtering function passed as a parameter. This allows dynamic filtering based on different conditions provided at runtime.

Description:

This JavaScript program defines a function that filters an array based on a callback function passed as a parameter. The callback function determines the filtering condition, making the solution flexible for different use cases, such as filtering even numbers, positive numbers, or values greater than a specific threshold.

Prerequisites:

- JavaScript Functions: Understanding how to define and call functions.
- Callback Functions: Knowledge of passing functions as arguments to other functions.
- Array Methods: Familiarity with the .filter() method for filtering elements in an array.
- Arrow Functions: Understanding shorthand function expressions for concise code.
- Conditional Statements: Using logical conditions to define filtering criteria.

Pre-Lab: Before implementing the function, review and practice the following concepts:

1. Functions as Parameters:
2. Array Filtering Using .filter():
3. Callback Functions:
4. Arrow Functions:

In-Lab: Follow these steps to implement a JavaScript function that filters an array based on a function passed as a parameter.

Steps to Implement:

1. Define an array with sample values.
2. Create a function that takes two parameters:
    - An array to be filtered.
    - A callback function that specifies the filtering condition.
3. Use the .filter() method to apply the filtering function.
4. Return the filtered array from the function.
5. Call the function with different filtering conditions and display the results using console.log().

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Procedure/Program:

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Data and Results:

Analysis and Inferences:

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Sample viva voce questions:

1. **What is a callback function in JavaScript, and how is it used in filtering an array?**

2. **How does the .filter() method work in JavaScript?**

3. **What is the advantage of passing a function as a parameter instead of writing the filter condition inside the main function?**

4. **How would you modify the program to filter odd numbers instead of even numbers?**

5. **Can you pass an anonymous function directly to .filter() instead of defining a named function? Give an example.**

Evaluator Remark (if Any):	**Marks Secured:_____out of 50**
	Signature of the Evaluator with Date