Experiment No.: 06

Date of Performance:

TITLE: Perform different operation on Array data.

Aim: Program to perform different operation on Array data

Problem Statement:

Write a JavaScript program that will create an array and perform following operations:

   i.   To remove specific element from the array

  ii.   Check if an array contains a specified value.

 iii.   To empty an array

Objective:

1. Learn different methods related with Date objects.

2. To learn how to extract time parameters from Date object in Javascript.

3. Apply the knowledge of time methods

Hardware Requirement:

Any CPU with Pentium Processor or similar, 256 MB RAM or more, 1 GB Hard Disk or more

Software Requirement:

➢ **IDE Software:** Visual Studio Code / Sublime Text3

➢ **Web Browser:** Google Chrome / Firefox/ Internet Explorer.

➢ **Operating System:** Windows 7/10, Linux or MAC OS

Theory:

JavaScript Array:

JavaScript array is a single variable that is used to store the elements or a group of values. You can add or remove elements from array in any position. In this article, we will discuss different ways to remove elements from array. There are many methods that is used to remove elements from JavaScript array which are discussed below:

pop() function: This method is use to remove elements from the end of an array.

shift() function: This method is use to remove elements from the start of an array.

splice() function: This method is use to remove elements from the specific index of an array.

filter() function: This method is use to remove elements in programmatically way.

Note: There are some other methods that are created by JavaScript inbuilt methods.

Below examples illustrate the methods to remove elements from a JavaScript array:

Remove Array elements by using pop() method: This method is used to remove the last element of the array and returns the removed element. This function decreases the length of the array by 1.

Remove Array elements by using pop() method: This method is used to remove the last element of the array and returns the removed element. This function decreases the length of the array by 1.

Remove Array elements by using shift() method: This method is used to remove the first element of the array and reducing the size of original array by 1.

Remove Array elements by using splice() method: This method is used to modify the contents of an array by removing the existing elements and/or by adding new elements. To remove elements by splice() method you can specify the elements in different ways.

Remove Array elements by using filter() method: This method is used to create a new array from a given array consisting of only those elements from the given array which satisfy a condition set by the argument function. To remove elements by filter() method you can specify the elements in different ways.

Remove Array elements by Delete Operator: Use the delete operator to remove elements from a JavaScript array.

Remove Array elements by Clear and Reset Operator: Use clear and reset operator to remove elements from a JavaScript array.

Conclusion:

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Review Questions:

1. Write a JavaScript program to illustrate use of pop() function
2. What is different between shift() method and splice method. Illustrate with example
3. Write a JavaScript code to print positive numbers in given array using filter() method.
4. Write an example to use reset and clear operator in Array.

REFERENCES:

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2. David Flanagan, "JavaScript: The Definitive Guide", O'Reilly, 6th Edition, ISBN: 9781491952023.
3. Mike Mackgrath, "Javascripts in easy steps" Dreamtech