Learner Assignment Submission Format

Learner Details

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- **Enrollment Number:SU625MR015**
- **Batch / Class:MERN Stack**
- **Assignment:Fruits**
- **Date of Submission:21/07/2025**

Problem Solving Activity 1.1

1. Program Statement

Favorite fruits list using Javascript

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2. Algorithm

1. Define an array of fruits
2. Display the original list of fruits in the console
3. Add a new fruit to the end of the list using the push method
4. Display the list after adding the new fruit in the console
5. Remove the first fruit from the list using the shift method
6. Display the list after removing the first fruit in the console
7. Sort the list of fruits in alphabetical order using the sort method
8. Display the list after sorting in the console
9. Display the length of the list in the console
10. Display the final list of fruits on the webpage

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3. Pseudocode

```
BEGIN
  DEFINE fruits = ["Barry", "Jackfruit", "Grapes", "sapota", "Guava", "orange"]
  DISPLAY "Original List:"
  FOR EACH fruit IN fruits
    DISPLAY fruit
  END FOR
  ADD "Mangoo" TO END OF fruits
  DISPLAY "List After Push:"
  DISPLAY fruits
  REMOVE FIRST ELEMENT FROM fruits
  DISPLAY "List After Shift:"
  DISPLAY fruits
  SORT fruits IN ALPHABETICAL ORDER
  DISPLAY "List After Sort:"
  DISPLAY fruits
  DISPLAY "Length of List:"
  DISPLAY LENGTH OF fruits
  DISPLAY FINAL LIST ON WEBPAGE
END
```

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4. Program Code

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <link rel="shortcut icon" href="vegetables.png" type="image/x-icon">
</head>
<body>
    <p id="list"></p>
    <script>
        let
fruits=["Barry","Jackfruit","Grapes","sapota","Guava","orange"];
         console.log("originalList:");
        for(let i=0;i<=fruits.length;i++){

            console.log(fruits[i]);
        }
        fruits.push("Mangoo");
        console.log("ListAfterPush:",fruits);

        fruits.shift();
        console.log("ListAfterShift:",fruits);

        fruits.sort();
        console.log("ListAfterSort",fruits);

        console.log("LengttOfList:",fruits.length);

         document.getElementById("list").textContent = "Result: " +
fruits;
```

```
    </script>
</body>
</html>
```

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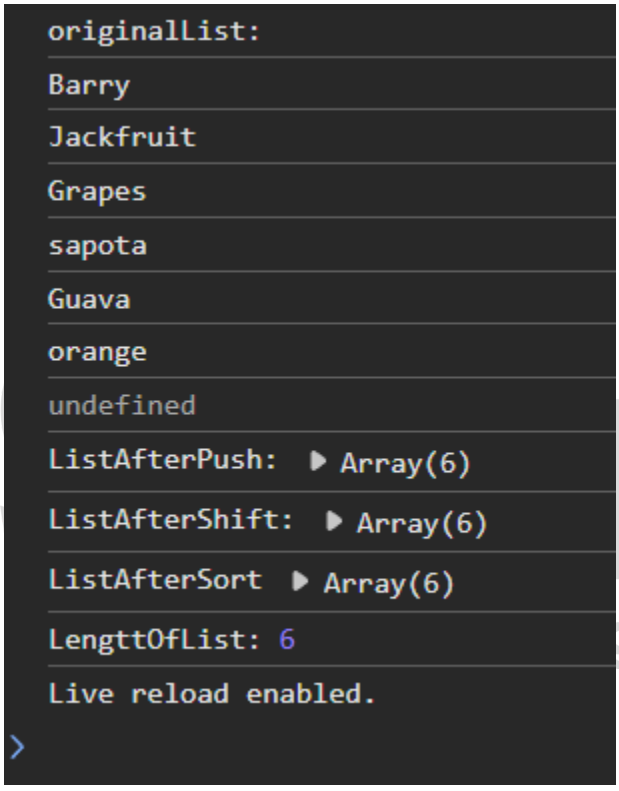
6. Screenshots of Output



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7. Observation / Reflection

The given HTML and JavaScript code is a simple demonstration of array operations. The code is well-structured and easy to understand. Here are some reflections:

- The code uses a modular approach by defining an array of fruits and performing various operations on it, making it easy to maintain and extend.

- The code uses the push method to add a new fruit to the end of the list, the shift method to remove the first fruit from the list, and the sort method to sort the list in alphabetical order.

- The code displays the list after each operation in the console, making it easy to track the changes.

- The code displays the final list of fruits on the webpage, making it visible to the user.