Local Storage

Local storage is a feature in HTML5 that allows web developers to store data locally on the client-side browser. The data stored in local storage is persistent, meaning it will remain on the user's device even after they close the browser or turn off their computer.

Local storage provides a simple key-value store that can be accessed using JavaScript code. Data can be stored and retrieved using the *setItem()* and *getItem()* methods, respectively. For example, the following code snippet sets the value of a key named "username" to "John" in local storage:

```
localStorage.setItem("username", "John");
```

To retrieve the value of this key, the following code can be used:

```
localStorage.getItem("username");
```

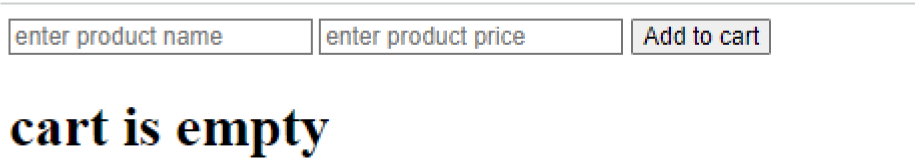
Example :

HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <input placeholder="enter product name" type="text" id="productname">
    <input placeholder="enter product price" type="number" id="productprice">
    <button onclick="addProductToCart()">Add to cart</button>
    <div id="output"></div>
</body>
<script>
```

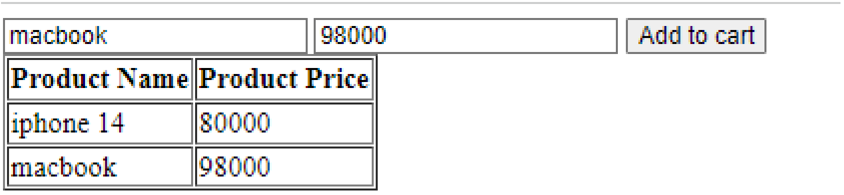
```
    function showCart(){
        let cart=localStorage.getItem("cart")
        cart=JSON.parse(cart)
        let output=document.getElementById("output")
        if (cart==null||cart.length==0){
            output.innerHTML="<h1>cart is empty</h1>"
        }
        else{
            let table="<table border='1'>";
                table+="<tr><th>Product Name</th><th>Product
Price</th></tr>"
                for (let i=0;i<cart.length;i++){

table+="<tr><td>"+cart[i].name+"</td><td>"+cart[i].price+"</td></tr>
"
                }
                table+="</table>"
                output.innerHTML=table
        }
    }
    function addProductToCart(){
        let cart=localStorage.getItem("cart")
        if(cart==null){
            cart=[]
        }
        else{
            cart=JSON.parse(cart)
        }
        let productname=document.getElementById("productname").value
        let
productprice=document.getElementById("productprice").value
        let product={
            name:productname,
            price:productprice
        }
        cart.push(product)
        localStorage.setItem("cart",JSON.stringify(cart))
        showCart()
    }
    showCart()
</script>
</html>
```

Output :



cart is empty

Local Storage



macbook

98000

Product Name	Product Price
iphone 14	80000
macbook	98000

Local Storage

Explanation :

In the code, the Local Storage API is used to create a shopping cart feature for an online store. The code allows users to add products to the cart and displays the current contents of the cart on the page.The *localStorage* object is used to store and retrieve data from the browser's local storage space. The *JSON.stringify()* method is used to convert the *cart* array into a string before storing it, and *JSON.parse()* is used to convert the string back to an array when retrieving the data.The *showCart()* function retrieves the cart data from local storage and displays it in an HTML table on the page. If the cart is empty, a message is displayed instead.The *addProductToCart()* function creates a new product object with the name and price entered by the user, adds it to the cart array, and updates the cart data stored in local storage. Finally, the *showCart()* function is called to update the cart display on the page.

Session Storage

Session storage is a web API that allows web applications to store key-value pairs in a user's browser for the duration of a browsing session. The data stored in session storage is only accessible within the current browser tab or window and is automatically cleared when the tab or window is closed. It is similar to local storage but has a shorter lifespan and is not shared between different browser tabs or windows.

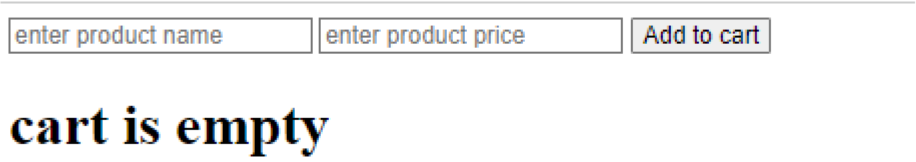
Example :

HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <input placeholder="enter product name" type="text" id="productname">
    <input placeholder="enter product price" type="number" id="productprice">
    <button onclick="addProductToCart()">Add to cart</button>
    <div id="output"></div>
</body>
<script>
    function showCart(){
        let cart=sessionStorage.getItem("cart")
        cart=JSON.parse(cart)
        let output=document.getElementById("output")
        if (cart==null||cart.length==0){
            output.innerHTML="<h1>cart is empty</h1>"
        }
        else{
            let table="<table border='1'>";
```

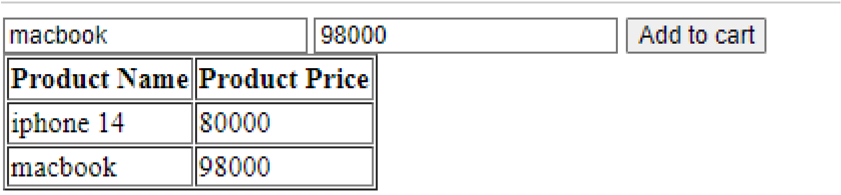
```
                table+="<tr><th>Product Name</th><th>Product
Price</th></tr>"
                for (let i=0;i<cart.length;i++){

table+="<tr><td>"+cart[i].name+"</td><td>"+cart[i].price+"</td></tr>
"
                }
                table+="</table>"
                output.innerHTML=table
        }
    }
    function addProductToCart(){
        let cart=sessionStorage.getItem("cart")
        if(cart==null){
            cart=[]
        }
        else{
            cart=JSON.parse(cart)
        }
        let productname=document.getElementById("productname").value
        let
productprice=document.getElementById("productprice").value
        let product={
            name:productname,
            price:productprice
        }
        cart.push(product)
        sessionStorage.setItem("cart",JSON.stringify(cart))
        showCart()
    }
    showCart()
</script>
</html>
```

Output :



cart is empty

Session Storage



macbook 98000

Product Name	Product Price
iphone 14	80000
macbook	98000

Session Storage

Explanation :

In the code, there is an input field for entering the product name and price, and a button to add the product to the cart. When the user clicks the button, the product name and price are stored in session storage. The showCart() function retrieves the cart data from the session storage and displays it in a table format.