JAVASCRIPT ASSIGNMENT

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```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Square Root Calculator</title>
<script>
function calculateSquareRoot() {
    var input = document.getElementById("number").value;
    var result = document.getElementById("result");

    if (isNaN(input)) {
        result.textContent = "Invalid input. Please enter a valid number.";
    } else {
        var number = parseFloat(input);
        if (number < 0) {
            result.textContent = "Square root of a negative number is not a
real number.";
        } else {
            result.textContent = "The square root of " + number + " is " +
Math.sqrt(number);
        }
    }
}
</script>
</head>
<body>

<h1>Square Root Calculator</h1>

<label for="number">Enter a number:</label>
<input type="text" id="number">
<button onclick="calculateSquareRoot()">Calculate</button>

<p id="result"></p>

</body>
</html>
```

Output:

Square Root Calculator

Enter a number: [4] [Calculate]

The square root of 4 is 2

Q)2

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Random Number Generator</title>
<script>
function generateRandomNumber() {
    var randomNumber = Math.floor(Math.random() * 10) + 1;
    document.getElementById("randomNumberDisplay").textContent = "Random
Number: " + randomNumber;
}
</script>
</head>
<body>

<h1>Random Number Generator</h1>

<button onclick="generateRandomNumber()">Generate Random Number</button>
<p id="randomNumberDisplay"></p>

</body>
```

```
</html>
```

Output:

Random Number Generator

Generate Random Number

Random Number: 4

Q3)

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Today's Date</title>
<script>
function printTodaysDate() {
    var today = new Date();
    var day = today.getDate();
    var month = today.getMonth() + 1;
    var year = today.getFullYear();


    var formattedDate = (day < 10 ? '0' : '') + day + '-' + (month < 10 ? '0'
: '') + month + '-' + year;

    document.getElementById("todaysDate").textContent = "Today's Date: " +
formattedDate;
}
</script>
</head>
<body>
```

```
<h1>Today's Date</h1>

<button onclick="printTodaysDate()">Print Today's Date</button>
<p id="todaysDate"></p>

</body>
</html>
```

Today's Date

Print Today's Date

Today's Date: 19-04-2024

Output:

Q)4

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Days Until Next New Year</title>
<script>
function calculateDaysUntilNewYear() {
    var today = new Date();
    var nextNewYear = new Date(today.getFullYear() + 1, 0, 1);
    var millisecondsPerDay = 24 * 60 * 60 * 1000;

    var daysLeft = Math.round((nextNewYear - today) / millisecondsPerDay);

    document.getElementById("daysLeft").textContent = "Days until next New
Year: " + daysLeft;
}
</script>
</head>
```

```
<body>

<h1>Days Until Next New Year</h1>

<button onclick="calculateDaysUntilNewYear()">Calculate</button>
<p id="daysLeft"></p>

</body>
</html>
```

Output:

Days Until Next New Year

Calculate

Days until next New Year: 256

Q)5

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Find Index of Substring</title>
<script>
function findIndexOfLocate() {
    var str = "Please locate where 'locate' occurs!";
    var index = str.indexOf("locate");

    if (index !== -1) {
        document.getElementById("result").textContent = "Index of 'locate': "
+ index;
```

```
    } else {
        document.getElementById("result").textContent = "'locate' not found in
the string.";
    }
}
</script>
</head>
<body>

<h1>Find Index of Substring</h1>

<button onclick="findIndexOfLocate()">Find Index of 'locate'</button>
<p id="result"></p>

</body>
</html>
```

OUTPUT:

Find Index of Substring

Find Index of 'locate'

Index of 'locate': 7

Q)6

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Convert First Letter to Uppercase</title>
<script>
function capitalizeFirstLetter() {
```

```
    var str = document.getElementById("inputString").value;

    // Check if the string is not empty
    if (str) {
        var capitalizedString = str.charAt(0).toUpperCase() + str.slice(1);
        document.getElementById("output").textContent = "Output: " +
capitalizedString;
    } else {
        document.getElementById("output").textContent = "Output: Please enter
a string.";
    }
}
</script>
</head>
<body>

<h1>Convert First Letter to Uppercase</h1>

<label for="inputString">Enter a string:</label>
<input type="text" id="inputString">
<button onclick="capitalizeFirstLetter()">Convert</button>

<p id="output"></p>

</body>
</html>
```
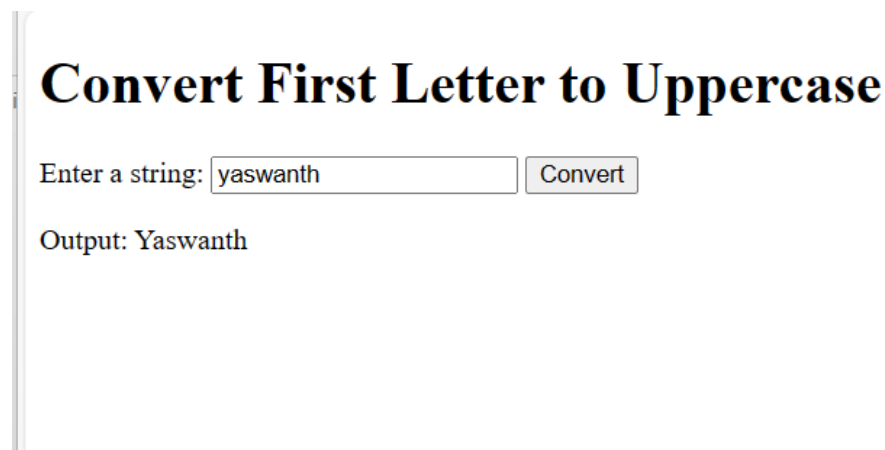
OUTPUT:

Convert First Letter to Uppercase

Enter a string: yaswanth   Convert

Output: Yaswanth

Q)7

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```html
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Display Navigator Properties</title>
<script>
function displayNavigatorProperties() {
    var properties = "";
    for (var prop in navigator) {
        properties += prop + ": " + navigator[prop] + "<br>";
    }
    document.getElementById("properties").innerHTML = properties;
}
</script>
</head>
<body>

<h1>Navigator Properties</h1>

<button onclick="displayNavigatorProperties()">Display Properties</button>

<div id="properties"></div>

</body>
```

OUTPUT:

Q)8

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Forward and Backward Navigation</title>
</head>
<body>

<h1>Forward and Backward Navigation</h1>

<button onclick="goBack()">Backward</button>
<button onclick="goForward()">Forward</button>

<script>
function goBack() {
    window.history.back();
}

function goForward() {
    window.history.forward();
}
</script>

</body>
</html>
```
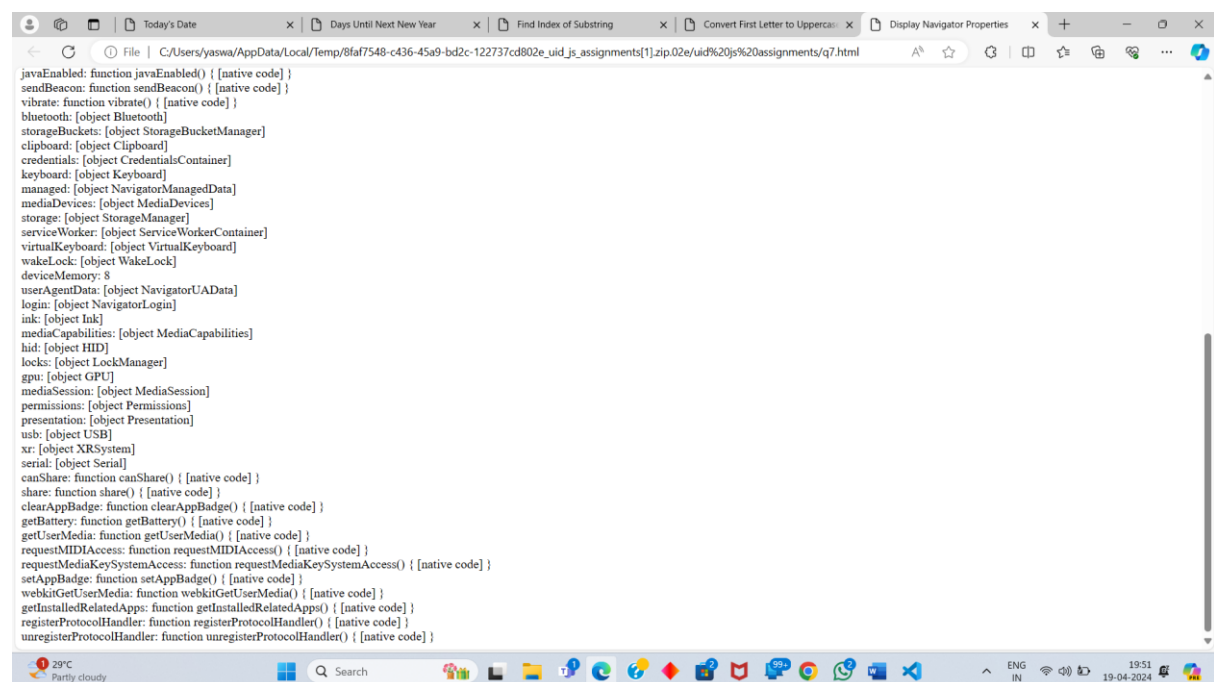
OUTPUT:

Forward and Backward Navigation

Backward Forward

Q)9

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Image Loader</title>
<style>
    img {
        display: block;
        max-width: 300px;
        margin: 10px auto;
    }
</style>
</head>
<body>

<h1>Image Loader</h1>

<img id="image1" src="Alleppey.jpg" alt="Image 1">
<img id="image2" src="backwaters.jpg" alt="Image 2" style="display: none;">

<button onclick="toggleImage()">Load Another Image</button>

<script>
function toggleImage() {
    var image1 = document.getElementById("image1");
    var image2 = document.getElementById("image2");

    if (image1.style.display === "none") {
        image1.style.display = "block";
        image2.style.display = "none";
    } else {
        image1.style.display = "none";
        image2.style.display = "block";
    }
}
</script>

</body>
</html>
```

Output:

Image Loader

Load Another Image

When we load another image it appeared second one

Image Loader

Load Another Image

Q)10

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <style>
body {
    transition: background-color 0.5s;
}
    </style>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Color Changer</title>

</head>
<body>
    <div>
        <input type="checkbox" id="redCheckbox"> Red
        <input type="checkbox" id="blueCheckbox"> Blue
        <input type="checkbox" id="greenCheckbox"> Green
```

```
    </div>

    <script>
        const redCheckbox = document.getElementById('redCheckbox');
const blueCheckbox = document.getElementById('blueCheckbox');
const greenCheckbox = document.getElementById('greenCheckbox');
const body = document.body;


redCheckbox.addEventListener('change', () => {
    body.style.backgroundColor = redCheckbox.checked ? 'red' : '';
});

blueCheckbox.addEventListener('change', () => {
    body.style.backgroundColor = blueCheckbox.checked ? 'blue' : '';
});

greenCheckbox.addEventListener('change', () => {
    body.style.backgroundColor = greenCheckbox.checked ? 'green' : '';
});
    </script>
</body>
</html>
```
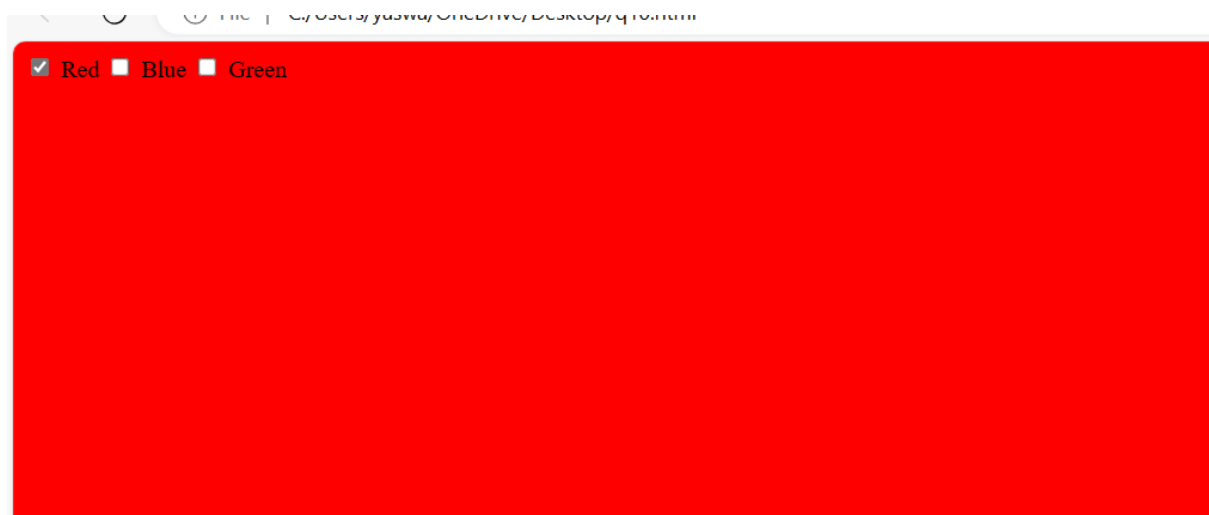
OUTPUT:

Q)11

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```html
<title>Add Paragraphs</title>
</head>
<body>

<h1>Add Paragraphs</h1>

<button id="addParagraphButton">Add Paragraph</button>

<div id="paragraphContainer"></div>

<script>
document.getElementById("addParagraphButton").addEventListener("click",
function() {
    var paragraph = document.createElement("p");
    paragraph.textContent = "This is a new paragraph.";
    document.getElementById("paragraphContainer").appendChild(paragraph);
});
</script>

</body>
</html>
```

OUTPUT:

Add Paragraphs

Add Paragraph

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.

This is a new paragraph.