lab program 5

Develop HTML page named as newspaper.html" having variety of HTML semantic elements with background colors, text-colors and size for figure,table,aside,section,article, header,footer etc.,

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

<style>
body {
font-family:Georgia;
line-height: 1.6;
color: #333;
max-width: 1200px;
margin: 0 auto;
padding: 20px;
background-color: #f4f4f4;
}

header {
background-color: #1a1a1a;
color: #fff;
padding: 20px;
text-align: center;
}
header h1 {
margin: 0;
font-size: 2.5em;
}
nav {
background-color: #333;
color: #fff;
padding: 10px;
}
nav ul {
list-style-type: none;
padding: 0;
margin: 0;
display: flex;
justify-content: center;
}
nav ul li {
margin: 0 10px;
}
nav ul li a {
color: #fff;
```

```
text-decoration: none;
}
main {
display: flex;
margin-top: 20px;
}
section {
flex: 2;
margin-right: 20px;
}
article {
background-color: #fff;
padding: 20px;
margin-bottom: 20px;
box-shadow: 0 0 10px rgba(0,0,0,0.1);
}
article h2 {
color: #1a1a1a;
font-size: 1.8em;
}
aside {
flex: 1;
background-color: #e6e6e6;
padding: 20px;
box-shadow: 0 0 10px rgba(0,0,0,0.1);
}
figure {
margin: 0;
text-align: center;
}
figure img {
max-width: 100%;
height: auto;
}
figcaption {
font-style: italic;
color: #666;
font-size: 0.9em;
}
table {
width: 100%;
border-collapse: collapse;
margin-bottom: 20px;
}
th, td {
border: 1px solid #ddd;
padding: 10px;
text-align: left;
}
th {
background-color: #f2f2f2;
```

```
}
footer {
background-color: #1a1a1a;
color: #fff;
text-align: center;
padding: 10px;
margin-top: 20px;
}
</style>
</head>

<body>
<header>
<h1>The Daily Chronicle</h1>
</header>

<nav>
<ul>
<li><a href="https://www.ndtvprofit.com/">Profit</a></li>
<li><a
href="https://www.ndtv.com/world#pfrom=home-gadgets_header-globalnav">World</a></li>
<li><a href="https://www.gadgets360.com/#pfrom=ndtv-globalnav">Technology</a></li>
<li><a href="https://sports.ndtv.com/#pfrom=ndtv-globalnav">Sports</a></li>
<li><a
href="https://www.ndtv.com/entertainment#pfrom=sports-header-globalnav">Entertainment</a>
</li>
</ul>
</nav>

<main>

<section>
<article>
<h2>Breaking News: Major Technological Breakthrough</h2>
<p>Scientists have announced a groundbreaking discovery in the field of quantum computing,
potentially revolutionizing the tech industry.</p>
<figure>
<img
src="https://www.cnet.com/a/img/resize/c7cb26e927bebaa784fb55a01e71d7fecb15d2e3/hub/20
19/06/26/3f76e99d-8055-46f3-8f27-558ee276b665/20180405-
ibm-q-quantum-computer-02.jpg?auto=webp&fit=crop&height=675&width=1200" alt="Quantum
Computer">
<figcaption>A state-of-the-art quantum computer at the research facility</figcaption>
</figure>
</article>

<article>
<h2>Local Sports Team Wins Championship</h2>
<p>In a thrilling match, our local team secured victory in the national championship, bringing
pride to our city.</p>
<table>
```

```
<tr>
<th>Team</th>
<th>Score</th>
</tr>
<tr>
<td>Local Heroes</td>
<td>3</td>
</tr>
<tr>
<td>Visiting Challengers</td>
<td>2</td>
</tr>
</table>
</article>

</section>

<aside>
<h3>Weather Update</h3>
<p>Expect sunny skies with a high of 75°F (24°C) today.</p>
<h3>Upcoming Events</h3>

<ul>
<li>City Festival - This Weekend</li>
<li>Tech Conference - Next Month</li>
<li>Charity Run - In Two Weeks</li>
</ul>

</aside>
</main>

<footer>
<p>&copy; 2024 The Daily Chronicle. All rights reserved.</p>
</footer>
</body>
</html>
```

Lab program 6

Apply HTML, CSS and Javascript to design a simple calculator to perform the following operations sum, product, difference, remainder, quotient, power, square-root and square.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Calculator</title>
    <style>
        body {
```

```
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
    background-color: #f0f0f0;
}
.calculator {
    background-color: #fff;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0,0,0,0.1);
    padding: 20px;
    width: 300px;
}
#display {
    width: 100%;
    height: 40px;
    font-size: 1.5em;
    text-align: right;
    margin-bottom: 10px;
    padding: 5px;
    box-sizing: border-box;
}
.buttons {
    display: grid;
    grid-template-columns: repeat(4, 1fr);
    gap: 10px;
}
button {
    padding: 10px;
    font-size: 1.2em;
    border: none;
    background-color: #e0e0e0;
    cursor: pointer;
    border-radius: 4px;
}
button:hover {
    background-color: #d0d0d0;
}
.operator {
    background-color: #f0a030;
    color: white;
}
```

```
.operator:hover {
            background-color: #e09020;
        }
    </style>
</head>
<body>
    <div class="calculator">
        <input type="text" id="display">
        <div class="buttons">
            <button onclick="appendToDisplay('7')">7</button>
            <button onclick="appendToDisplay('8')">8</button>
            <button onclick="appendToDisplay('9')">9</button>
            <button class="operator" onclick="setOperation('+')">+</button>
            <button onclick="appendToDisplay('4')">4</button>
            <button onclick="appendToDisplay('5')">5</button>
            <button onclick="appendToDisplay('6')">6</button>
            <button class="operator" onclick="setOperation('-')">-</button>
            <button onclick="appendToDisplay('1')">1</button>
                <button onclick="appendToDisplay('2')">2</button>
                <button onclick="appendToDisplay('3')">3</button>
                <button class="operator" onclick="setOperation('*')">*</button>
                <button onclick="appendToDisplay('0')">0</button>
                <button onclick="appendToDisplay('.')">.</button>
                <button class="operator" onclick="calculate()">=</button>
                <button class="operator" onclick="setOperation('/')">/</button>
                <button class="operator" onclick="setOperation('%')">%</button>
                <button class="operator" onclick="setOperation('^')">x<sup>y</sup></button>
                <button class="operator" onclick="squareRoot()">√</button>
                <button class="operator" onclick="square()">x<sup>2</sup></button>
                <button onclick="clearDisplay()">C</button>
            </div>
    </div>
<script>
let display = document.getElementById('display');
let currentValue = '';
let operation = '';
let previousValue = '';

function appendToDisplay(value) {
currentValue += value;
display.value = currentValue;
}

function clearDisplay() {
```

```
currentValue = '';
operation = '';
previousValue = '';
display.value = '';
}


function setOperation(op) {
if (currentValue !== '') {
            if (previousValue !== '') {
                calculate();
            }
            operation = op;
            previousValue = currentValue;
            currentValue = '';
        }

    }

    function calculate() {
        if (previousValue !== '' && currentValue !== '') {
            let result;
            const prev = parseFloat(previousValue);
            const current = parseFloat(currentValue);
            switch(operation) {
                case '+':
                    result = prev + current;
                    break;
                case '-':
                    result = prev - current;
                    break;
                case '*':
                    result = prev * current;
                    break;
                case '/':
                    result = prev / current;
                    break;
                case '%':
                    result = prev % current;
                    break;
                case '^':
                    result = Math.pow(prev, current);
                    break;
```

```
            }

            display.value = result;


        }
    }

    function squareRoot() {
        if (currentValue !== '') {
            const result = Math.sqrt(parseFloat(currentValue));
            display.value = result;

        }
    }

    function square() {
        if (currentValue !== '') {
            const result = Math.pow(parseFloat(currentValue), 2);
            display.value = result;
            }
    }
  </script>
</body>
</html>
```