



# GraphicEra

HILL UNIVERSITY

Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)

University under section 2(f) of UGC Act, 1956

## DEHRADUN CAMPUS

### TERM WORK

## “Full Stack Web Development”

**PCS - 693**

**B-Tech (CSE)**

**Semester - VI<sup>th</sup>**

**2023-24**

**SUBMITTED BY:**

Nilesh Bhanot  
2118851  
A-46  
BTECH  
CSE (6<sup>th</sup> Sem)

**SUBMITTED TO:**

Mr. Piyush Bagla  
(Assistant Professor)  
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Graphic Era Hill University,  
Dehradun.



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## DEHRADUN CAMPUS

## CERTIFICATE

**University Roll No.:2118851**

**Class Roll No.:46**

This is to certify that Mr. Nilesh Bhanot has satisfactorily completed experiments / Term work in the laboratory of this University. The course of the experiment/ Term work with subject code PCS-693 in partial fulfillment of his/her requirements at the 6<sup>th</sup> semester of B.Tech. (CSE) prescribed by the Graphic Era Hill University during the years 2023-2024.

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**Faculty In charge**



# Graphic Era

## HILL UNIVERSITY

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### STUDENT LAB REPORT SHEET

Name of Student : Nilesh Bhanot

Mob.No : 9528029993

Address Permanent : Banjarawala, Dehradun

Father's Name : Dr. Surender Bhanot Occupation : Homoeopathic Physician

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Mother's Name : Vidushi Bhanot Occupation : HouseWife

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Grade A B C

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Marks 5 3 1

| S.No. | Practical | D.O.P. | Date of Submission | Grade (Viva) | Grade (Report File) | Total Marks (out of 10) | Student's Signature | Teacher's Signature |
|-------|-----------|--------|--------------------|--------------|---------------------|-------------------------|---------------------|---------------------|
| 1     |           |        |                    |              |                     |                         |                     |                     |
| 2     |           |        |                    |              |                     |                         |                     |                     |
| 3     |           |        |                    |              |                     |                         |                     |                     |
| 4     |           |        |                    |              |                     |                         |                     |                     |
| 5     |           |        |                    |              |                     |                         |                     |                     |
| 6     |           |        |                    |              |                     |                         |                     |                     |
| 7     |           |        |                    |              |                     |                         |                     |                     |
| 8     |           |        |                    |              |                     |                         |                     |                     |
| 9     |           |        |                    |              |                     |                         |                     |                     |
| 10    |           |        |                    |              |                     |                         |                     |                     |
| 11    |           |        |                    |              |                     |                         |                     |                     |
| 12    |           |        |                    |              |                     |                         |                     |                     |
| 13    |           |        |                    |              |                     |                         |                     |                     |
| 14    |           |        |                    |              |                     |                         |                     |                     |

| S.No. | Practical | D.O.P. | Date of Submission | Grade (Viva) | Grade (Report File) | Total Marks (out of 10) | Student's Signature | Teacher's Signature |
|-------|-----------|--------|--------------------|--------------|---------------------|-------------------------|---------------------|---------------------|
| 15    |           |        |                    |              |                     |                         |                     |                     |
| 16    |           |        |                    |              |                     |                         |                     |                     |
| 17    |           |        |                    |              |                     |                         |                     |                     |
| 18    |           |        |                    |              |                     |                         |                     |                     |
| 19    |           |        |                    |              |                     |                         |                     |                     |
| 20    |           |        |                    |              |                     |                         |                     |                     |
| 21    |           |        |                    |              |                     |                         |                     |                     |
| 22    |           |        |                    |              |                     |                         |                     |                     |
| 23    |           |        |                    |              |                     |                         |                     |                     |
| 24    |           |        |                    |              |                     |                         |                     |                     |
| 25    |           |        |                    |              |                     |                         |                     |                     |
| 26    |           |        |                    |              |                     |                         |                     |                     |
| 27    |           |        |                    |              |                     |                         |                     |                     |
| 28    |           |        |                    |              |                     |                         |                     |                     |
| 29    |           |        |                    |              |                     |                         |                     |                     |
| 30    |           |        |                    |              |                     |                         |                     |                     |
| 31    |           |        |                    |              |                     |                         |                     |                     |
| 32    |           |        |                    |              |                     |                         |                     |                     |
| 33    |           |        |                    |              |                     |                         |                     |                     |
| 34    |           |        |                    |              |                     |                         |                     |                     |
| 35    |           |        |                    |              |                     |                         |                     |                     |
| 36    |           |        |                    |              |                     |                         |                     |                     |

Total No. of Practicals Alloted .....

Total No. of Practicals Completed.....

Percentage Attendance of Practical.....

## Q1. Demonstrate all the text formatting tags in a single HTML page.

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 1</title>
</head>
<body>
  <b>This is bold</b><br>
  <strong>This is strong text</strong><br>
  <i>This is italic text</i><br>
  <em>This is emphasized text</em><br>
  <mark>This is marked text</mark><br>
  <small>This is smaller text</small><br>
  <del>This is deleted text</del><br>
  <ins>This is inserted text</ins><br>
  <sub>This is subscript text</sub><br>
  <sup>This is superscript text</sup><br>
</body>
</html>
```

### Output:

**This is bold**  
**This is strong text**  
*This is italic text*  
*This is emphasized text*  
**This is marked text**  
This is smaller text  
~~This is deleted text~~  
This is inserted text  
This is subscript text  
This is superscript text

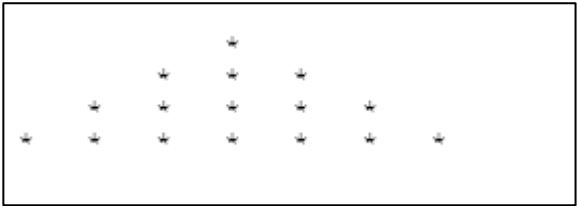
Q2. Write an HTML code to draw the following Figure:



Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 2</title>
</head>
<body>
  <pre>
    *
    * * *
    * * * * *
    * * * * * *
  </pre>
</body>
</html>
```

Output:



### Q3. Create a web page to print the following table:

**List of Course-wise Subjects**

| Sr. No. | Course | Subject                | Marks    |          | Category |          | Practical/ Theory |
|---------|--------|------------------------|----------|----------|----------|----------|-------------------|
|         |        |                        | Internal | External | Internal | External |                   |
| 1       | MBA    | Management Accounting  | 30       | 70       | -        | ✓        | Theory            |
|         |        | Information Technology | 30       | 70       | -        | ✓        | T and P           |
|         |        | Basics of Marketing    | 30       | 70       | -        | ✓        | Theory            |
|         |        | E-Commerce             | 50       | -        | ✓        | -        | Theory            |
| 2       | MCM    | Visual Basic           | 30       | 70       | -        | ✓        | T and P           |
|         |        | Internet Technology    | 30       | 70       | -        | ✓        | T and P           |
|         |        | Network Technology     | 30       | 70       | -        | ✓        | Theory            |
|         |        | VB.Net                 | 30       | 70       | -        | ✓        | T and P           |
|         |        | Linux                  | 30       | 70       | -        | ✓        | T and P           |
|         |        | ISA                    | 50       | -        | ✓        | -        | Theory            |

#### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question3</title>
  <style>
    table, th, td
    {
      border: 2px solid black;
      padding: 2px;
      margin: 2px;
    }
  </style>
</head>
<body>
  <table>
    <tr>
      <th rowspan="2">Sr No</th>
      <th rowspan="2">Course</th>
      <th rowspan="2">Subject</th>
      <th colspan="2">Marks</th>
      <th colspan="2">Category</th>
      <th rowspan="2">Practical/Theory</th>
    </tr>
    <tr style="font-weight: bold;">
      <td>Internal</td>
      <td>External</td>
      <td>Internal</td>
      <td>External</td>
    </tr>
    <tr>
```

|   |
|---|
| <td rowspan="4">1</td><br><td rowspan="4">MBA</td><br><td>Management Accounting</td><br><td>30</td><br><td>70</td><br><td>-</td><br><td>Tick</td><br><td>Theory</td><br></tr> |
|---|

|   |
|---|
| <td>Information Technology</td><br><td>30</td><br><td>70</td><br><td>-</td><br><td>Tick</td><br><td>T and P</td><br></tr> |
|---|

|   |
|---|
| <td>Basics of Marketing</td><br><td>30</td><br><td>70</td><br><td>-</td><br><td>Tick</td><br><td>Theory</td><br></tr> |
|---|

|  |
|--|
| <td>Basics of Marketing</td><br><td>50</td><br><td>-</td><br><td>Tick</td><br><td>-</td><br><td>Theory</td><br></tr> |
|--|

|   |
|---|
| <td rowspan="6">2</td><br><td rowspan="6">MCM</td><br><td>Visual Basic</td><br><td>30</td><br><td>70</td><br><td>-</td><br><td>Tick</td><br><td>T and P</td><br></tr> |
|---|

|  |
|--|
| <td>Internet Technology</td><br><td>30</td><br><td>70</td><br><td>-</td><br><td>Tick</td><br><td>T and P</td><br></tr> |
|--|



```
<tr>
  <td>Network Technology</td>
  <td>30</td>
  <td>70</td>
  <td>-</td>
  <td>Tick</td>
  <td>Theory</td>
</tr>
```

```
<tr>
  <td>VB.Net</td>
  <td>30</td>
  <td>70</td>
  <td>-</td>
  <td>Tick</td>
  <td>T and P</td>
</tr>
```

```
<tr>
  <td>Linux</td>
  <td>30</td>
  <td>70</td>
  <td>-</td>
  <td>Tick</td>
  <td>T and P</td>
</tr>
```

```
<tr>
  <td>ISA</td>
  <td>50</td>
  <td>-</td>
  <td>Tick</td>
  <td>-</td>
  <td>Theory</td>
</tr>
```

```
</table>
</body>
</html>
```



**Output:**

| Sr No | Course | Subject                | Marks    |          | Category |          | Practical/Theory |
|-------|--------|------------------------|----------|----------|----------|----------|------------------|
|       |        |                        | Internal | External | Internal | External |                  |
| 1     | MBA    | Management Accounting  | 30       | 70       | -        | Tick     | Theory           |
|       |        | Information Technology | 30       | 70       | -        | Tick     | T and P          |
|       |        | Basics of Marketing    | 30       | 70       | -        | Tick     | Theory           |
|       |        | Basics of Marketing    | 50       | -        | Tick     | -        | Theory           |
| 2     | MCM    | Visual Basic           | 30       | 70       | -        | Tick     | T and P          |
|       |        | Internet Technology    | 30       | 70       | -        | Tick     | T and P          |
|       |        | Network Technology     | 30       | 70       | -        | Tick     | Theory           |
|       |        | VB.Net                 | 30       | 70       | -        | Tick     | T and P          |
|       |        | Linux                  | 30       | 70       | -        | Tick     | T and P          |
|       |        | ISA                    | 50       | -        | Tick     | -        | Theory           |

#### Q4. Using table related tags align the images with hyperlinks



**Table With Mobile Connections**











|   |   |   |  |
|---|---|---|--|
|  |  |  |  |
|  | Table With Images   |   |  |
|  |  |  |  |

#### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 4</title>
  <style>
    table, td
    {
      border: 2px solid beige;
      padding: 5px;
    }
    img
    {
      width: 100px;
      height: 100px;
    }
  </style>
</head>
<body>
  <h1>Table with mobile connections</h1>
  <table>
    <tr>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <td></td>
      <td colspan="2" style="text-align: center; font-weight: bold; font-size: larger;">Table with Images</td>
      <td></td>
    </tr>
    <tr>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
    </tr>
  </table>
</body>
```

```
<tr>
</tr>
</table>
</body>
</html>
```

Output:

| Table with mobile connections   |   |   |  |
|---|---|---|--|
|    |    |    |    |
|    | Table with Images   |   |    |
|  |  |  |  |

**Q5. Create a web page with the following using HTML:**

**I. To embed an image map in a web page.**

**II. To fix the hot spots.**

**III. Show all the related information when the hot spots are clicked.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 5</title>
</head>
<body>
  
  <map name="image-map">
    <area target="" alt="" title="" href="https://en.wikipedia.org/wiki/Uttarakhand"
coords="306,230,292,252,302,274,337,308,357,308,379,262,333,235,306,226,309,261,313,287,308,261"
shape="poly">
    <area target="" alt="" title="" href="https://en.wikipedia.org/wiki/Haryana"
coords="204,283,239,305,243,336,260,337,284,337,277,278,277,258,237,277,217,261,201,267,200,283,270,306,
280,305" shape="poly">
  </map>
</body>
</html>
```

**Output:**



## Q6. Create a web page having frames as follows:

| Your Name<br>Punch line etc.   |   |                              |
|--------------------------------|---|------------------------------|
| <u>Objective</u>               | Display information here of selected link | Display relevant images here |
| <u>Personal Information</u>    |   |                              |
| <u>Family Information</u>      |   |                              |
| <u>Educational Information</u> |   |                              |
| <u>Experience</u>              |   |                              |
| <u>Achievements</u>            |   |                              |
| <u>Other</u>                   |   |                              |
| Your contact details           |   |                              |

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .main_container {
      position: absolute;
    }

    .container {
      width: 953px;
      position: relative;
      border: 2px solid black;
      display: flex;
      justify-content: center;
    }

    .frame1 {
      border: 2px solid black;
      position: relative;
      top: -2px;
      height: 220px;
      width: 250px;
    }

    .frame2 {
      border: 2px solid black;
      position: relative;
      top: -2px;
      right: 6px;
      height: 220px;
      width: 400px;
    }

    .frame3 {
      border: 2px solid black;
      position: relative;
      top: -2px;
      right: 12px;
```

```

        height: 220px;
        width: 300px;
    }
</style>
</head>

<body>
    <div class="main_container">
        <div class="container">
            <p>Nilesh Bhanot<br>Be the best of whatever you are</p>
        </div>
        <iframe class="frame1" src="question6_links.html">
            << /p>
        </iframe>
        <iframe class="frame2" src="" frameborder="0"></iframe>
        <iframe class="frame3" src="" frameborder="0"></iframe>
    </div>
</body>
</html>

```

### new.html source code:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        ul{
            list-style: none;
            line-height: 26px;
        }
        a{
            color:green !important;
        }
        a:active{
            color: red !important;
        }
        a:visited{
            color:blue !important;
        }
    </style>
</head>
<body>
    <ul>
        <li><a href="">Objective</a></li>
        <li><a href="">Personal Information</a></li>
        <li><a href=""> Family Information</a></li>
        <li><a href="">Educational Information</a></li>
        <li><a href=""> Experience</a></li>
        <li><a href="">Achiements</a></li>
        <li><a href="">Other</a></li>
    </ul>
</body>
</html>

```

Output:

|   |  |  |
|---|--|--|
| Nilesh Bhanot<br>Be Grateful  |  |  |
| <a href="#">Objective</a><br><a href="#">Personal Information</a><br><a href="#">Family Information</a><br><a href="#">Educational Information</a><br><a href="#">Experience</a><br><a href="#">Achiements</a><br><a href="#">Other</a> |  |  |



## Q7. Write a HTML code for the following snapshot.

Basic information

Full name:

Birth date:

Gender: ☐ Male ☐ Female

Address:

Phone number:

Extra information

Interests: ☐ Books ☐ Movies ☐ Videogames

Favorite color:

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 7</title>
  <style>
    input, label, fieldset, button
    {
      margin: 10px;
    }
    *
    {
      font-size: large;
    }
  </style>
</head>
<body>
  <fieldset>
    <legend>
      Basic Information
    </legend>
    <label for="fname">Full Name:</label>
    <input type="text" id="fname">
    <br>

    <label for="bdate">Birth Date:</label>
    <input type="date" id="bdate">
    <br>

    <label for="gender" >Gender:</label>
```

```
<input type="radio" name="gender">Male
<input type="radio" name="gender">Female
<br>

<label for="address">Address:</label>
<input type="text" id="address">
<br>

<label for="phone">Phone Number:</label>
<input type="tel" id="phone">
</fieldset>

<fieldset>
  <legend>
    Extra Information
  </legend>

  <label for="interest" >Interests:</label>
  <input type="checkbox" name="interest">Books
  <input type="checkbox" name="interest">Movies
  <input type="checkbox" name="interest">Video Games
  <br>


  <label for="color">Favorite Color:</label>
  <input type="color" id="color">
</fieldset>

<button type="submit">Send Data</button>
<button type="reset">Reset Form</button>
</body>
</html>
```

## Output:

### Basic Information

Full Name:

Birth Date:  

Gender: ☐ Male ☐ Female

Address:

Phone Number:

### Extra Information

Interests: ☐ Books ☐ Movies ☐ Video Games

Favorite Color:

**Q8. Create a web page of customer profile for data entry of customers in a Hotel, The profile should include Name, Address, Age, gender, Room Type (A/C, Non-A/C or Deluxe), Type of payment (Cash, Credit/Debit Card or Coupons).**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 8</title>
  <style>
    input, label, fieldset, button
    {
      margin: 10px;
    }
    *
    {
      font-size: large;
    }
  </style>
</head>
<body>
  <fieldset>
    <legend>
      Customer Profile Information
    </legend>
    <label for="fname">Full Name:</label>
    <input type="text" id="fname">
    <br>

    <label for="address">Address:</label>
    <input type="text" id="address">
    <br>

    <label for="phone">Phone Number:</label>
    <input type="tel" id="phone">
    <br>

    <label for="age">Age:</label>
    <input type="number" id="age">
    <br>

    <label for="gender" >Gender:</label>
    <input type="radio" name="gender">Male
    <input type="radio" name="gender">Female
    <br>

    <label for="rtype">Room Type:</label>
    <input type="radio" id="rtype">A/C
    <input type="radio" id="rtype">Non A/C
    <input type="radio" id="rtype">Deluxe
    <br>

    <label for="payment">Payment method:</label>
    <input type="checkbox" id="payment">Card
    <input type="checkbox" id="payment">Credit/Debit Card
```

```
<input type="checkbox" id="payment">Coupons
<br>

<label for="amount">Amount:</label>
<input type="number" name="amount" id="amount">
<br>

<button type="submit">Submit</button>
</fieldset>
</body>
</html>
```

## Output:

### Customer Profile Information

Full Name:

Address:

Phone Number:

Age:

Gender: ☐ Male ☐ Female

Room Type: ☐ A/C ☐ Non A/C ☐ Deluxe

Payment method: ☐ Card ☐ Credit/Debit Card ☐ Coupons

Amount:

## Q9. Demonstrate the use of following HTML5 Tags:

I. <Video>

II. <Audio>

III. <Header>

IV. <Footer>

V. <Nav>

VI. <Embed>

VII. <Datalist>

VIII. <Bdi>

IX. <Article>

X. <Output>

XI. <Keygen>

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 9</title>
</head>
<body>
  <h1>Header tag</h1>
  <header>This is the header of the page</header>
  <h1>Video tag</h1>
  <video src="test.mp4" width="320" height="240" controls></video>
  <h1>Audio tag</h1>
  <audio src="test.mp3" controls></audio>
  <h1>Nav tag</h1>
  <nav>This is the nav tag</nav>
  <h1>Embed tag</h1>
  <embed src="https://www.youtube.com/embed/bEdIpaKsJtU"></embed>
  <h1>DataList tag</h1>
  <label for="browser">Choose your browser from the list:</label>
  <input list="browsers" name="browser" id="browser">
  <datalist id="browsers">
    <option value="Brave">Brave</option>
    <option value="Chrome">Chrome</option>
    <option value="Firefox">Firefox</option>
    <option value="Edge">Edge</option>
  </datalist>

  <h1>Bdi tag</h1>
  <ul>
    <li><bdi>Newbie</bdi></li>
    <li><bdi>Rams</bdi></li>
    <li><bdi>خوبصورت</bdi></li>
  </ul>
  <h1>Article tag</h1>
  <article>
    <p>Microsoft Edge is a web browser developed by Microsoft, released in 2015. Microsoft Edge replaced Internet Explorer.</p>
  </article>
  <h1>Output tag</h1>
  <form onclick="x.value=parseInt(a.value)+parseInt(b.value)">
```

```
<input type="number" id="a" value="50">
+<input type="number" id="b" value="25">
=<output name="x" for="a b"></output>
</form>
<h1>Keygen tag</h1>
<form>
  <keygen name="rsaPublicKey" keytype="RSA">
    User's name:
    <input type="text" name="usr_name">
    <input type="submit">
  </form>
<h1>Footer tag</h1>
<footer>This is the footer of the page</footer>
</body>
</html>
```



Output:

## Header tag

This is the header of the page

## Video tag



## Audio tag



## Nav tag

This is the nav tag

## Embed tag



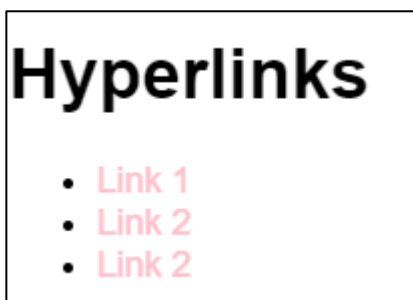
**Q10. Create a web page to show all hyperlinks with following specification:**

- **Default color is pink.**
- **Active color is blue.**
- **Visited color is Green.**
- **Hyperlink should be without underline.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Hyperlink Pages</title>
  <style>
    body
    {
      font-family: Arial,sans-serif;
    }
    a
    {
      text-decoration: none;
      color:pink;
    }
    a:active
    {
      color:blue;
      cursor: pointer;
    }
    a:visited
    {
      color:green;
    }
  </style>
</head>
<body>
  <h1>Hyperlinks</h1>
  <ul>
    <li><a href="www.google.com" class="default">Link 1</a></li>
    <li><a href="www.google.com" class="default">Link 2</a></li>
    <li><a href="www.google.com" class="default">Link 2</a></li>
  </ul>
</body>
</html>
```

**Output:**



## Q11. Create Box Shadow and text Shadow using CSS3.

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Question 2</title>
  <style>
    p
    {
      text-shadow: 5px 5px rgb(180, 180, 163);
      box-shadow: 100px 100px lightblue inset;
    }
  </style>

</head>
<body>
  <p>
    Lorem ipsum dolor sit amet consectetur adipisicing elit. Eveniet, totam fugiat ipsa eius deleniti cupiditate,
    quam animi explicabo modi ullam non ea consequatur? Fugit ex sapiente atque iure ipsam voluptatibus eius,
    aspernatur accusantium asperiores praesentium dolorem error excepturi minima nobis?
  </p>
</body>
</html>
```

### Output:

Lorem ipsum dolor sit amet consectetur adipisicing elit. Eveniet, totam fugiat ipsa eius deleniti cupiditate, quam animi explicabo modi ullam non ea consequatur? Fugit ex sapiente atque iure ipsam voluptatibus eius, aspernatur accusantium asperiores praesentium dolorem error excepturi minima nobis?

## Q12. Create Rounded Corners using css3.

### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    body
    {
      font-family: Arial, sans-serif;
    }
    .round
    {
      width:300px;
      padding:20px;
      background-color: rgb(196, 185, 206);
      margin:50px auto;
      border-radius: 30px;
    }
    h3
    {
      text-align: center;
    }
  </style>
</head>
<body>
  <div class="round">
    <h3>Rounded corner box</h3>
  </div>
</body>
</html>
```

### Output:

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Delectus, voluptas eum? Consequuntur odio molestias adipisci quaerat iusto optio quas. Nam, facilis reprehenderit. Explicabo ab officiis animi ducimus minus, culpa doloribus maxime porro perferendis fugiat sed enim tempora magni beatae at?

**Q13. Create a web page to show newspaper layout effects on contents given in web page (i.e. in multiple columns).**

**Source Code:**

```
<!DOCTYPE html>
<html>
<head>
  <style>
    .newspaper {
      column-count: 3;
      column-gap: 20px;
      orphans: 1;
      widows: 1;
    }

    .newspaper p {
      margin-bottom: 10px;
    }

    .newspaper h1, .newspaper h2, .newspaper h3 {
      page-break-after: avoid;
    }
  </style>
</head>
<body>
  <div class="newspaper">
    <h1>Newspaper Layout Example</h1>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed commodo, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa.</p>

    <h2>Section Heading</h2>
    <p>Curabitur auctor, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa. Sed commodo, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa.</p>

    <h3>Subsection Heading</h3>
    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Quasi omnis ullam ducimus magni ex, odit nisi dignissimos nemo unde nobis repellat expedita consequatur ipsa quas eius quibusdam cumque magnam id vero ut doloribus exercitationem? Quos ex consequuntur eum quas neque?</p>
  </div>
</body>
</html>
```

Output:

|  | Section Heading   | Subsection Heading   |
|--|---|--|
| <h1>Newspaper<br/>Layout<br/>Example</h1> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed commodo, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa.</p> | <p>Curabitur auctor, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa. Sed commodo, velit eget euismod euismod, mi velit rhoncus nisl, quis fringilla nibh nunc ac massa.</p> | <p>Lorem ipsum dolor, sit amet consectetur adipiscing elit. Quasi omnis ullam ducimus magni ex, odit nisi dignissimos nemo unde nobis repellat expedita consequatur ipsa quas eius quibusdam cumque magnam id vero ut doloribus exercitationem? Quos ex consequuntur eum quas neque?</p> |

**Q14. Create a web page to show transition effect in such a way so that elements gradually change from one style to another style.**

**Source Code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Transition Effect</title>
  <style>
    .box {
      background-color: rebeccapurple;
      color: aqua;
      transition: background-color 2.5s;
    }
    .box:hover {
      background-color: lightblue;
      color: black;
    }
  </style>
</head>
<body>
  <div class="box">
    <p>
      Lorem, ipsum dolor sit amet consectetur adipisicing elit. Deserunt amet dolorem, voluptatibus nobis ea
      veniam fugit sint dicta possimus corporis earum eum distinctio architecto a eligendi iusto ad aliquid molestias
      neque delectus ipsum quia consequatur? Id voluptas exercitationem sequi ut nemo quisquam quasi maiores,
      ducimus sapiente voluptate omnis nisi a.
    </p>
  </div>
</body>
</html>
```

**Output:**

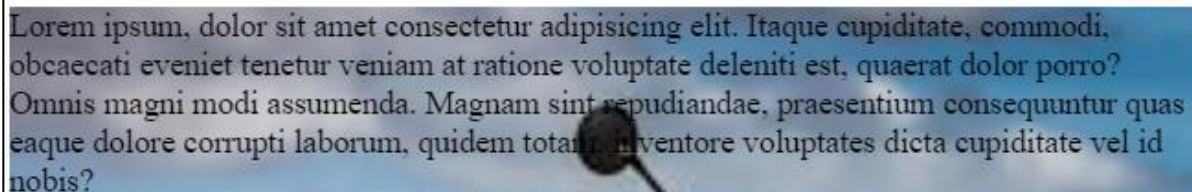
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Deserunt amet dolorem, voluptatibus nobis ea veniam fugit sint dicta possimus corporis earum eum distinctio architecto a eligendi iusto ad aliquid molestias neque delectus ipsum quia consequatur? Id voluptas exercitationem sequi ut nemo quisquam quasi maiores, ducimus sapiente voluptate omnis nisi a.

**Q15. Create a web page to show fixed background image (this image will not scroll with the rest of the page).**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Ques6</title>
  <style>
    p
    {
      background-repeat: no-repeat;
      background-attachment: fixed;
      background-size: 100vmax;
      background-image: url("bike.jpeg");
    }
  </style>
</head>
<body>
  <div>
    <p>
      Lorem ipsum, dolor sit amet consectetur adipisicing elit. Itaque cupiditate, commodi, obcaecati eveniet
      tenetur veniam at ratione voluptate deleniti est, quaerat dolor porro? Omnis magni modi assumenda. Magnam sint
      repudiandae, praesentium consequuntur quas eaque dolore corrupti laborum, quidem totam, inventore voluptates
      dicta cupiditate vel id nobis?
    </p>
  </div>
</body>
</html>
```

**Output:**



Lorem ipsum, dolor sit amet consectetur adipisicing elit. Itaque cupiditate, commodi, obcaecati eveniet tenetur veniam at ratione voluptate deleniti est, quaerat dolor porro? Omnis magni modi assumenda. Magnam sint repudiandae, praesentium consequuntur quas eaque dolore corrupti laborum, quidem totam, inventore voluptates dicta cupiditate vel id nobis?



**Q16. Create a web page to position a background image and repeat the image horizontally or vertically.**

**Source Code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Background Image</title>
  <style>
    *{
      background-image: url("bike.jpeg");
      background-repeat: repeat-x;
    }
  </style>
</head>
<body>
  <div class="background-image"></div>
</body>
</html>
```

**Output:**



## Q17. Create a web page to resize the background of web page.

### Source Code:

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<style>
  h2{
    text-align: center;
  }

  #description{
    height: 20px;
    background-color: aquamarine;
    padding: 20px;
    font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
  }
  a{
    cursor: pointer;
  }
  a:hover{
    color: red;
  }
  a:visited{
    color:purple;
  }
  a:active{
    color: blue;
  }
  #link{
    text-align: center;
    margin: 20px;
    font-size: 1.2rem;
  }
  #layer_1{
    font-size: 40px;
    color: blue;
    z-index: -1;
    position: absolute;
    top: 20%;
  }
  #layer_2{
    font-size: 50px;
    color: red;
    z-index: 0;
    position:absolute ;
    top: 24%;
  }
  img{
    width: 30%;
    height: 30%;
```

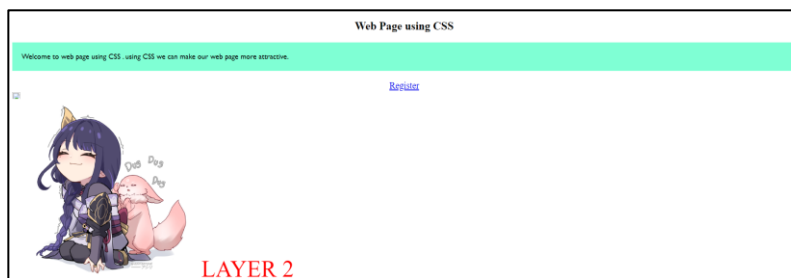
```

}
</style>
<body>
  <h2>Web Page using CSS</h2>
  <div id="description">
    Welcome to web page using CSS . using CSS we can make our web page more attractive.
  </div>
  <div id="link">

    <a href="#">Register</a>
  </div>
  <div id="layer_1">
    
    LAYER 1
  </div>
  <div id="layer_2">
    
    LAYER 2
  </div>
</body>
</html>

```

## Output:



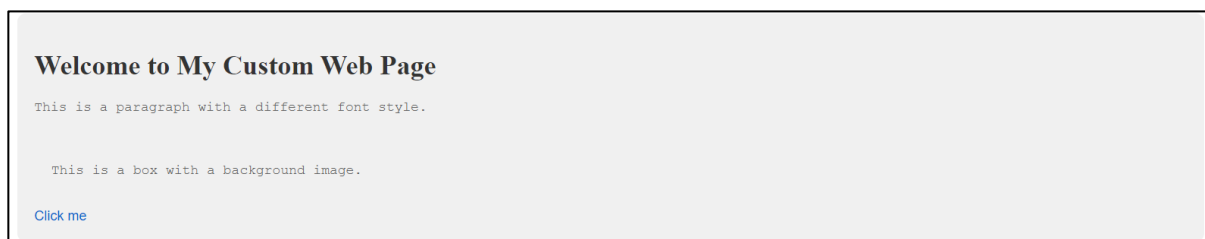
**Q18. Design a web page using CSS which includes the following:**

- i. Use different font styles.**
- ii. Set background image for both the page and single elements on page.**
- iii. Control the repetition of image with background-repeat property.**
- iv. Define style for links as a: link, a:active, a:hover, a:visited**
- v. Add customized cursors for links.**
- vi. Work with layers.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Custom Web Page</title>
  <link rel="stylesheet" href="styles9.css">
</head>
<body>
  <div class="container">
    <h1>Welcome to My Custom Web Page</h1>
    <p>This is a paragraph with a different font style.</p>
    <div class="box">
      <p>This is a box with a background image.</p>
    </div>
    <a href="#" class="custom-link">Click me</a>
  </div>
</body>
</html>
```

**Output:**



**Q19. Design a web page to validate credit card numbers per the specifications below. The following tables outline the major credit cards you want to validate and allow prefixes and lengths:**

| Card Type        | Prefix | Length |
|------------------|--------|--------|
| Master Card      | 51–55  | 16     |
| Visa             | 4      | 13,16  |
| American Express | 34,37  | 15     |

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Credit Card Validator</title>
</head>
<body>
  <h1>Credit Card Validator</h1>
  <form id="creditCardForm">
    <label for="cardType">Select Card Type:</label>
    <select id="cardType" name="cardType">
      <option value="visa">Visa</option>
      <option value="mastercard">MasterCard</option>
      <option value="amex">American Express</option>
    </select>
    <br>
    <label for="cardNumber">Enter Credit Card Number:</label>
    <input type="text" id="cardNumber" name="cardNumber" required>
    <button type="submit" onclick="validateCreditCard()">Validate</button>
  </form>
</body>
<script>
  function validateCreditCard() {
    const cardType = document.getElementById('cardType').value;
    const cardNumber = document.getElementById('cardNumber').value.trim().replace(/\D/g, "");
    const resultDiv = document.getElementById('result');

    let isValid = false;
    let cardTypeText = "";

    switch (cardType) {
      case 'visa':
        const visaPattern = /^4[0-9]{12}(?:[0-9]{3})?$/;
        isValid = visaPattern.test(cardNumber) && (cardNumber.length === 16 || cardNumber.length === 13);
        cardTypeText = 'Visa';
        break;
      case 'mastercard':
        const mastercardPattern = /^5[1-5][0-9]{14}$/;
        isValid = mastercardPattern.test(cardNumber) && cardNumber.length === 16;
        cardTypeText = 'MasterCard';
        break;
```

```
case 'amex':
    const amexPattern = /^3[47][0-9]{13}$/;
    isValid = amexPattern.test(cardNumber) && cardNumber.length === 15;
    cardTypeText = 'American Express';
    break;
default:
    isValid = false;
    break;
}
if (isValid) {
    alert(`Valid ${cardTypeText} card number.`);
} else {
    alert('Invalid credit card number for selected card type.');
```

```
return false; // Prevent the default form submission
}
```

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

**Output:**

## Credit Card Validator

Select Card Type:

Enter Credit Card Number:

**Q20. Design a web page to validate the following according to the standard conditions.**

**a. Name**

**b. E-Mail-id and**

**c. Password**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Validation</title>
</head>
<body>
  <h1>Form Validation</h1>
  <form id="validationForm" onsubmit="return validateForm()">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name"><br>
    <label for="email">E-Mail:</label>
    <input type="email" id="email" name="email" required><br>
    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required><br>
    <button type="submit">Submit</button>
  </form>
  <script>
    function validateForm() {
      const name = document.getElementById('name').value.trim();
      const email = document.getElementById('email').value.trim();
      const password = document.getElementById('password').value;

      if (!/^[A-Za-z\s]+$/.test(name)) {
        alert('Name should only contain letters and spaces.');
```

## Output:

# Form Validation

Name:

E-Mail:

Password:



**Q21. Store some country names and their capitals. Ask the user to select a country and its capital from two lists. If the match is correct, display “Correct answer”; otherwise, display an error message and tell the correct answer.**

**Source Code:**

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

<h2>Country-Capital Quiz</h2>

<form id="quizForm" onsubmit="return validateAnswer()">
  <label for="country">Select a country:</label>
  <select id="country" name="country">
    <option value="USA">USA</option>
    <option value="UK">UK</option>
    <option value="France">France</option>
    <option value="Germany">Germany</option>
    <option value="Japan">Japan</option>
  </select>

  <label for="capital">Select its capital:</label>
  <select id="capital" name="capital">
    <option value="Washington">Washington</option>
    <option value="London">London</option>
    <option value="Paris">Paris</option>
    <option value="Berlin">Berlin</option>
    <option value="Tokyo">Tokyo</option>
  </select>

  <input type="submit" value="Submit">
</form>

<div id="result"></div>

<script>
function validateAnswer() {
  var selectedCountry = document.getElementById('country').value;
  var selectedCapital = document.getElementById('capital').value;
  var resultDiv = document.getElementById('result');
  var countryCapitalMap = {
    "USA": "Washington",
    "UK": "London",
    "India": "New Delhi",
    "Germany": "Berlin",
    "Japan": "Tokyo"
  };

  if (countryCapitalMap[selectedCountry] === selectedCapital) {
    resultDiv.innerText = "Correct answer!";
  } else {
```

```
        var correctCapital = countryCapitalMap[selectedCountry];
        resultDiv.innerText = "Incorrect answer. The capital of " + selectedCountry + " is " + correctCapital + ".";
    }

    return false;
}
</script>
</body>
</html>
```

### Output:

## Country-Capital Quiz

Select a country:  Select its capital:

Incorrect answer. The capital of USA is Washington.

## Q22. Design the simple Calculator.

### Source Code:

```
<!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;
      background-color: #f0f0f0;
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
      margin: 0;
    }
    .calculator {
      background-color: #fff;
      border-radius: 10px;
      box-shadow: 0px 4px 10px rgba(0, 0, 0, 0.2);
      padding: 20px;
      width: 300px;
    }
    .calculator-display {
      margin-bottom: 10px;
      padding: 10px;
      font-size: 24px;
      text-align: right;
      border: 1px solid #ccc;
      border-radius: 5px;
      background-color: #f9f9f9;
    }
    .calculator-buttons {
      display: grid;
      grid-template-columns: repeat(4, 1fr);
      gap: 5px;
    }
    .calculator-button {
      padding: 15px;
      font-size: 18px;
      border: 1px solid #ccc;
      border-radius: 5px;
      background-color: #fff;
      cursor: pointer;
      transition: background-color 0.3s ease;
    }
    .calculator-button:hover {
      background-color: #f0f0f0;
    }
    .calculator-button.double {
      grid-column: span 2;
    }
    .calculator-button.clear {
```

```

        background-color: #5900ff;
        color: #fff;
    }
    .calculator-button.clear:hover {
        background-color: #c0392b;
    }
    .calculator-button.equal {
        background-color: #1a00ac;
        color: #fff;
    }
    .calculator-button.equal:hover {
        background-color: #2980b9;
    }
</style>
</head>
<body>
    <div class="calculator">
        <div class="calculator-display" id="display" readonly></div>
        <div class="calculator-buttons">
            <button class="calculator-button clear" onclick="clearDisplay()">C</button>
            <button class="calculator-button" onclick="appendToDisplay('7')">7</button>
            <button class="calculator-button" onclick="appendToDisplay('8')">8</button>
            <button class="calculator-button" onclick="appendToDisplay('9')">9</button>
            <button class="calculator-button" onclick="appendToDisplay('/')">/</button>
            <button class="calculator-button" onclick="appendToDisplay('4')">4</button>
            <button class="calculator-button" onclick="appendToDisplay('5')">5</button>
            <button class="calculator-button" onclick="appendToDisplay('6')">6</button>
            <button class="calculator-button" onclick="appendToDisplay('*')">x</button>
            <button class="calculator-button" onclick="appendToDisplay('1')">1</button>
            <button class="calculator-button" onclick="appendToDisplay('2')">2</button>
            <button class="calculator-button" onclick="appendToDisplay('3')">3</button>
            <button class="calculator-button" onclick="appendToDisplay('-')">-</button>
            <button class="calculator-button" onclick="appendToDisplay('0')">0</button>
            <button class="calculator-button" onclick="appendToDisplay('.')">.</button>
            <button class="calculator-button equal" onclick="calculateResult()">=</button>
            <button class="calculator-button" onclick="appendToDisplay('+')">+</button>
        </div>
    </div>

    <script>
        function appendToDisplay(value) {
            document.getElementById('display').textContent += value;
        }

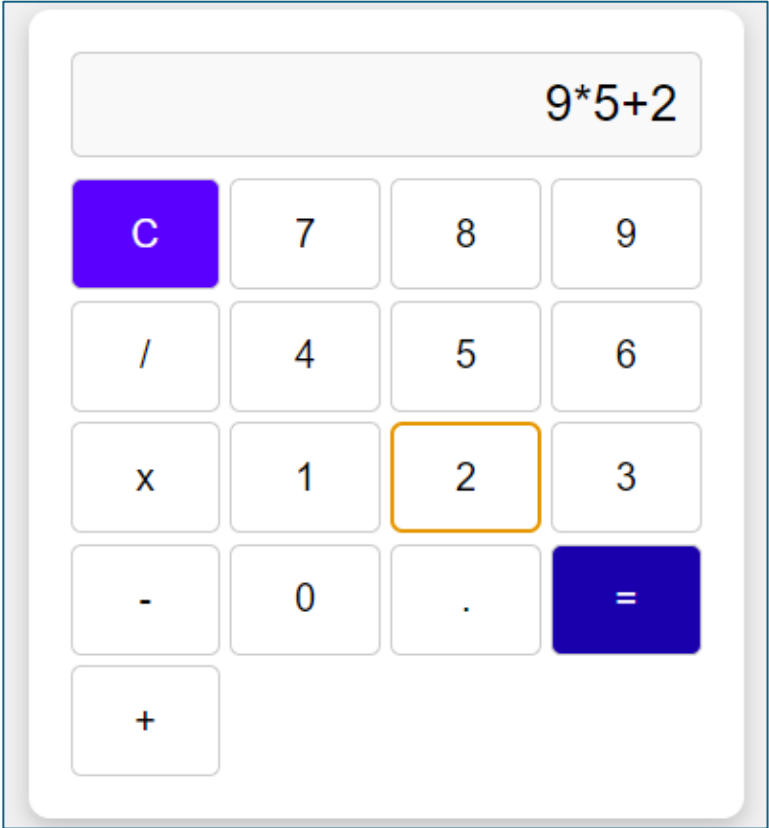
        function clearDisplay() {
            document.getElementById('display').textContent = "";
        }

        function calculateResult() {
            const displayValue = document.getElementById('display').textContent;
            if (displayValue) {
                try {
                    const result = eval(displayValue);
                    document.getElementById('display').textContent = result;
                } catch (error) {
                    document.getElementById('display').textContent = 'Error';
                }
            }
        }
    </script>

```

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

Output:



### Q23. Design a web page that is self-modifying itself after every minute.

#### Source Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Self-Modifying Web Page</title>
</head>
<body>
<h1 id="dynamic">Initial Content</h1>
<script>
  function updateContent() {
    var currentTime = new Date();
    var hours = currentTime.getHours();
    var minutes = currentTime.getMinutes();
    var seconds = currentTime.getSeconds();
    var content = "Current time: " + hours + ":" + minutes + ":" + seconds;
    document.getElementById("dynamic").innerText = content;
  }
  updateContent();
  setInterval(updateContent, 1000);
</script>
</body>
</html>
```

#### Output:

## Current time: 22:59:26

**Q24. Write a code for a web application that accepts the user's birthdate in a textbox and displays the day of the week in a message box at the click of a button.**

### Source Code:

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

<h2>Calculate day of the week</h2>
<label for="dob">Enter your birthdate:</label>
<input type="date" id="dob">

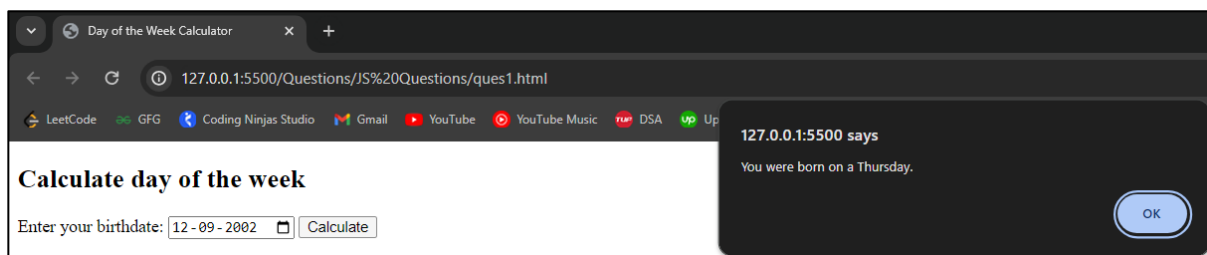
<button onclick="calculateDayOfWeek()">Calculate</button>

<script>
function calculateDayOfWeek() {
  var dob = document.getElementById('dob').value;

  if (dob) {
    var dateObject = new Date(dob);
    var options = { weekday: 'long' };
    var dayOfWeek = new Intl.DateTimeFormat('en-US', options).format(dateObject);

    alert("You were born on a " + dayOfWeek + ".");
  } else {
    alert("Please enter your birthdate.");
  }
}
</script>
</body>
</html>
```

### Output:



**Q25. Write a script that inputs a telephone number as a string in the form (555)555-555. The script should use the strings method split to extract the area code as a token and the last four digits of the phone numbers as a token. Display the area code in one test field and the seven-digit phone number in another text field.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Telephone Number Extraction</title>
    <style>
      body {
        font-family: monospace;
      }
      fieldset {
        display: inline;
      }
      #areaCode,
      #phoneNumberPart {
        outline: none;
        border: none;
        border-bottom: 2px solid #03cdff;
      }

      #phoneNumber {
        outline: none;
        border: 2px solid #03cdff;
      }
    </style>
  </head>
  <body>
    <h2>Telephone Number Extraction</h2>

    <fieldset>
      <legend>Telephone</legend>
      <label for="phoneNumber">Enter Telephone Number (Format: (555)555-5555):</label>
      <input type="text" id="phoneNumber" placeholder="(555)555-5555" />

      <br /><br />

      <label for="areaCode">Area Code:</label>
      <input type="text" id="areaCode" readonly />

      <br /><br />

      <label for="phoneNumberPart">Phone Number:</label>
      <input type="text" id="phoneNumberPart" readonly />

      <br /><br />

      <button onclick="extractNumber()">Extract</button>
    </fieldset>

    <script>
```



```
function extractNumber() {  
  let phoneNumber = document.getElementById("phoneNumber").value;  
  let extractedParts = phoneNumber.match(/\d+/g);  
  
  if (extractedParts.length === 3) {  
    let areaCode = extractedParts[0];  
    let phoneNumberPart = extractedParts[1] + extractedParts[2];  
    document.getElementById("areaCode").value = areaCode;  
    document.getElementById("phoneNumberPart").value = phoneNumberPart;  
  } else {  
    alert("Invalid phone number format. Please enter in the format: (555)555-5555");  
  }  
}  
</script>  
</body>  
</html>
```

### Output:

**Telephone Number Extraction**

Telephone

Enter Telephone Number (Format: (555)555-5555): (022) 543-1234

Area Code: 022

Phone Number: 5431234

Extract

**Q26. Create a web page that applies the invert filter to an image if the user moves the mouse over it.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Invert Filter on Mouseover</title>
  <style>
    img {
      width: 300px;
      transition: filter 0.5s;
    }
  </style>
</head>
<body>

<h2>Move your mouse over the image</h2>

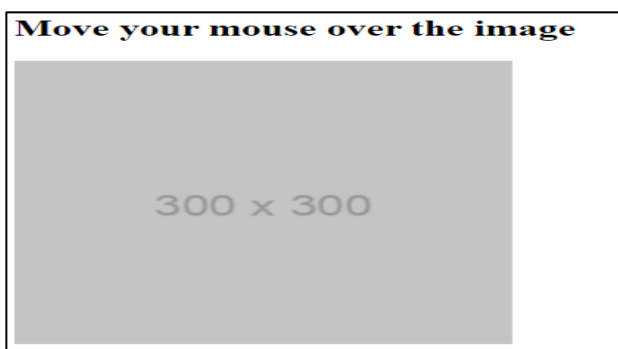


<script>
  function applyInvertFilter() {
    document.getElementById('image').style.filter = 'invert(100%)';
  }

  function removeInvertFilter() {
    document.getElementById('image').style.filter = 'none';
  }
</script>

</body>
</html>
```

**Output:**



**Q27. Write an HTML Page to scroll the text message from right to left at the status bar of browser window.**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Status Bar Text Scroller</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
    }
  </style>
</head>
<body>

<script>
  function scrollStatusBar() {
    var text = "This is a scrolling message in the status bar. ";
    var speed = 50;
    var pos = 0;

    setInterval(function() {
      text = text.substring(1) + text.charAt(0);
      window.status = text;
      pos++;
      if (pos >= text.length) {
        pos = 0;
      }
    }, speed);
  }
  scrollStatusBar();
</script>
</body>
</html>
```

**Q28. Design a web page to perform a survey on four different models of Maruti (Maruti-K10, Zen-Astelo, Wagnor, Maruti- SX4) owned by people living in four metro cities(Delhi, Mumbai, Chennai & Kolkatta). Display tabulated report like format given below:**

|          | Maruti-K10 | Zen-Astelo | Wagnor | Maruti-SX4 |
|----------|------------|------------|--------|------------|
| Delhi    |            |            |        |            |
| Mumbai   |            |            |        |            |
| Cheenai  |            |            |        |            |
| Kolkatta |            |            |        |            |

Calculate the number of cars of different models in each metro city.

**Source Code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Maruti Car Survey</title>
  <style>
    table, th, td {
      border: 1px solid black;
      border-collapse: collapse;
      padding: 5px;
      text-align: center;
    }
  </style>
</head>
<body>
  <h1>Maruti Car Survey</h1>

  <label for="city">Select your city:</label>
  <select id="city">
    <option value="Delhi">Delhi</option>
    <option value="Mumbai">Mumbai</option>
    <option value="Chennai">Chennai</option>
    <option value="Kolkata">Kolkata</option>
  </select>

  <label for="model">Select your Maruti car model:</label>
  <select id="model">
    <option value="K10">Maruti-K10</option>
    <option value="Zen-Astelo">Zen-Astelo</option>
    <option value="Wagnor">Wagnor</option>
    <option value="SX4">Maruti-SX4</option>
  </select>

  <button onclick="submitSurvey()">Submit</button>
```

```

<h2>Survey Results:</h2>
<table id="results">
  <tr>
    <th>City</th>
    <th>Maruti-K10</th>
    <th>Zen-Astelo</th>
    <th>Wagnor</th>
    <th>Maruti-SX4</th>
  </tr>
</table>

<script>
  var surveyResults = {
    "Delhi": { "K10": 10, "Zen-Astelo": 15, "Wagnor": 12, "SX4": 5 },
    "Mumbai": { "K10": 34, "Zen-Astelo": 21, "Wagnor": 43, "SX4": 12 },
    "Chennai": { "K10": 21, "Zen-Astelo": 54, "Wagnor": 34, "SX4": 33 },
    "Kolkata": { "K10": 12, "Zen-Astelo": 41, "Wagnor": 76, "SX4": 93 }
  };

  function submitSurvey() {
    var city = document.getElementById('city').value;
    var model = document.getElementById('model').value;
    surveyResults[city][model]++;
    displayResults();
  }

  function displayResults() {
    var table = document.getElementById('results');
    table.innerHTML = '<tr><th>City</th><th>Maruti-K10</th><th>Zen-
Astelo</th><th>Wagnor</th><th>Maruti-SX4</th></tr>';
    for (var city in surveyResults) {
      var row = '<tr><td>' + city + '</td>';
      for (var model in surveyResults[city]) {
        row += '<td>' + surveyResults[city][model] + '</td>';
      }
      row += '</tr>';
      table.innerHTML += row;
    }
  }
</script>
</body>
</html>

```

Output:

# Maruti Car Survey

Select your city:  Select your Maruti car model:

## Survey Results:

| City    | Maruti-K10 | Zen-Astelo | Wagnor | Maruti-SX4 |
|---------|------------|------------|--------|------------|
| Delhi   | 10         | 15         | 13     | 5          |
| Mumbai  | 34         | 21         | 43     | 12         |
| Chennai | 21         | 54         | 34     | 33         |
| Kolkata | 12         | 41         | 76     | 93         |

## Q29. write a program to write and retrieve cookies in php.

### Source Code:

```
<?php
    setcookie("user","Newbie",time()+86400,"/");
    if(isset($_COOKIE["user"]))
    {
        echo "Cookie is set \n";
    }
?>

<?php
    echo "{$_COOKIE["user"]}";
?>
```

### Output:

Cookie is set

Newbie

### Q30. create a webpage to maintain session using PHP.

#### Source Code:

```
<?php
    session_start();
    $_SESSION["user"] = "Aman";
    if (isset($_SESSION["user"])) {
        echo "Session is created";
    }
?>

<?php
    session_start();
    echo $_SESSION["user"];
?>
```

#### Output:

Session is created

Newbie



**Q31. Design a login page having username password and a button. Match username and password of this form against the username and password present in the database. If match successful then print "login successful" otherwise print "incorrect username and password"**

**Source Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <form action="file.php" method="get">
        <label for="uname">Username</label>
        <input type="text" required name="uname"><br><br>
        <label for="pass">Password</label>
        <input type="password" required name="pass"><br><br>
        <input type="submit" value="submit">
    </form>
</body>
</html>

<?php
$conn=mysqli_connect("localhost","root","","clientdb");
if($conn)
{
    echo "Connection Successfull". "<br>";
    $u_name=$_GET['uname'];
    $password=$_GET['pass'];
    $result=mysqli_query($conn, "SELECT * FROM record WHERE username='$u_name' AND
password='$password'");
    if (mysqli_num_rows($result) > 0) {
        echo "User found:<br>";
        while ($row = mysqli_fetch_assoc($result)) {
            echo "Login Successful <br>";
            echo "Username: " . $row['username'] . "<br> Password: " . $row['password'] . "<br>";
        }
    }
    else {
        echo "No user found with the provided credentials.". "<br>";
    }
}
else
{
    echo "Not connected";
}
?>
```

## Output:

|                                       |  |
|---------------------------------------|--|
| Username                              | <input type="text" value="Newbie"/>    |
| Password                              | <input type="password" value="....."/> |
| <input type="button" value="submit"/> |  |

Connection Successfull

User found:

Login Successful

Username: Newbie

Password: 123456

### Q32 Wap to fetch details of all students whose percentage is greater than 70.

#### Source Code:

```
<?php
$conn=mysqli_connect("localhost","root","","student");
$sql = "SELECT Rollno, name, ((mark1 + mark2 + mark3 + mark4 + mark5) / 5) AS percentage
        FROM marks
        HAVING percentage > 70";
$result = $conn->query($sql);
if ($result->num_rows > 0) {
    while($row = $result->fetch_assoc()) {
        echo "RollNo: " . $row["Rollno"] . " - Name: " . $row["name"] . "<br>";
    }
} else {
    echo "0 results";
}
$conn->close();
?>
```

#### Output:

```
RollNo: 1 - Name: John
RollNo: 2 - Name: Alice
RollNo: 3 - Name: Bob
RollNo: 4 - Name: Emma
RollNo: 5 - Name: Sam
```

**Q33. Create a functional component that accepts props and displays a personalized message.**

**Source Code:**

```
import React from 'react';
import ReactDOM from 'react-dom/client';
function Message(props)
{
  return (<h1>{props.msg}</h1>)
}
export default Message;

import React from 'react';
import ReactDOM from 'react-dom/client';
import Message from './App';
const root=ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <>
    <Message msg="Hello Newbie, this is a functional component!"/>
  </>
);
```

**Output:**

**Hello Newbie, this is a functional component!**

**Q34. Create a class component that maintains a counter and provides buttons to increment and decrement the counter.**

**Source Code:**

```
import react,{Component} from 'react';
import ReactDOM from 'react-dom/client';
```

```
class Counter extends Component
{
  constructor(props)
  {
    super(props);
    this.state={count :0};
  }
  increment =()=>>
  {
    this.setState({count: this.state.count+1 });
  };
  decrement=()=>>
  {
    this.setState({count:this.state.count-1 });
  };
  render()
  {
    return (
      <div>
        <h2>Count: {this.state.count}</h2>
        <button onClick={this.increment}>Increment</button>
        <button onClick={this.decrement}>Decrement</button>
      </div>
    );
  }
}
export default Counter;
```

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import Counter from './App';
const root=ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <>
    <Counter />
  </>
);
```

**Output:**

**Count:5**

Increment

Decrement

### Q35. Create a component with a form that updates the state based on user input

#### Source code:

```
import React, {useState} from 'react';
const UserForm=()=>>
{
  const [name,setName]=useState("");

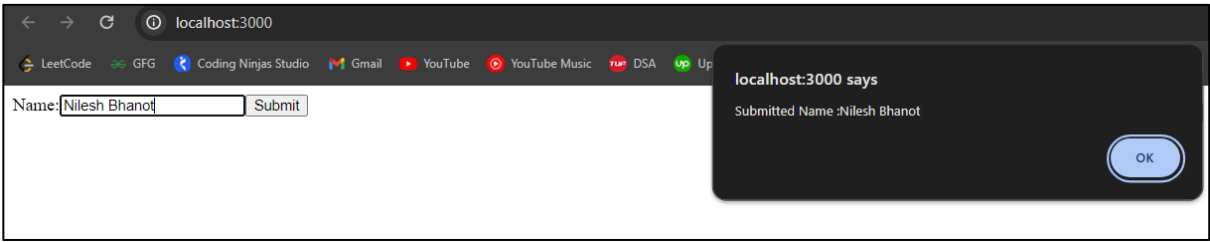
  const handleChange=(event)=>{
    setName(event.target.value);
  };

  const handleSubmit=(event)=>{
    alert(` Submitted Name :${name}`);
  };

  return(
    <form onSubmit={handleSubmit}>
      <label>
        Name:
        <input type="text" value={name} onChange={handleChange} />
      </label>
      <button type="submit">Submit</button>
    </form>
  );
}
export default UserForm;

import React from 'react';
import ReactDOM from 'react-dom/client';
import UserForm from './App';
const root=ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <>
    <UserForm/>
  </>
);
```

Output:





### Q36. Create a React application with multiple routes.

#### Source code:

```
import react from 'react';
import ReactDOM from 'react-dom/client';
function Home()
{
  return (<h3>This is home page</h3>);
}
export default Home;
```

```
import react from 'react';
import ReactDOM from 'react-dom/client';
function About()
{
  return (<h3>This is About page</h3>);
}
export default About;
```

```
import react from 'react';
import ReactDOM from 'react-dom/client';
function Contact()
{
  return (<h3>This is Contact page</h3>);
}
export default Contact;
```

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import Home from './Home';
import About from './About';
import Contact from './Contact'
import { BrowserRouter, Routes, Route } from 'react-router-dom';
const root=ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <>
    <BrowserRouter>
      <Routes>
        <Route path="/" element={ <Home/> }/>
        <Route path="/About" element={ <About/> }/>
        <Route path="/Contact" element={ <Contact/> }/>
      </Routes>
    </BrowserRouter>
  </>
);
```

**Output:**

**This is home page**

**This is About page**

**This is Contact page**