

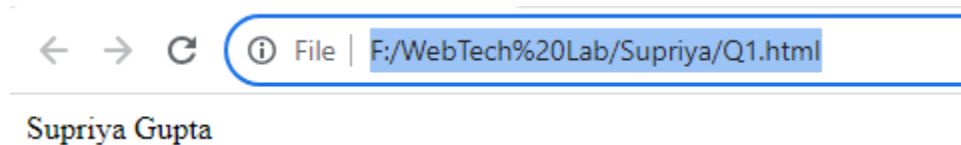
# WEB TECHNOLOGY LAB 1(HTML)

1. Display your name as plane text WEB Browser .

```
<html>
```

Supriya Gupta

```
</html>
```



2. Display your name in WEB Browser declared inside the body .

```
<!DOCTYPE html>
```

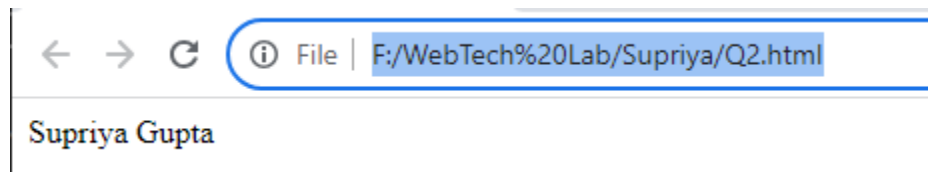
```
<html>
```

```
<body>
```

Supriya Gupta

```
</body>
```

```
</html>
```



3. Write a complete source code to demonstrate the use of html, head, title, body tag

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.3 HTML code</title>
```

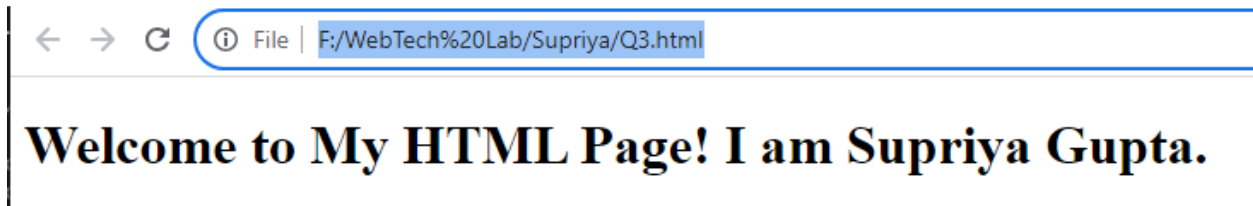
```
</head>
```

```
<body>
```

```
<h1>Welcome to My HTML Page! I am Supriya Gupta.</h1>

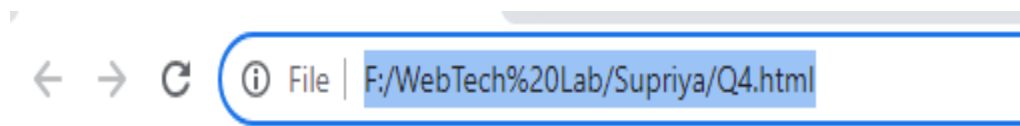
</body>

</html>
```



#### 4. Write a source code to demonstrate whitespace collapsing.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q.4 Whitespace Collapsing</title>
</head>
<body>
  <div>
    <p>Multiple   spaces   are   collapsed.</p>
    <p>  Leading and trailing spaces are preserved.  </p>
    <p>  Line breaks
      are also preserved.
    </p>
  </div>
</body>
</html>
```



Multiple spaces are collapsed.

Leading and trailing spaces are preserved.

Line breaks are also preserved.

5. Create two paragraphs. Paragraph 1 containing the heading as Management Colleges in Nepal and Paragraph 2 containing the heading as Engineering Colleges in Nepal. Heading of Paragraph 2 must be smaller than the heading of Paragraph 1. Also show the use of b, i, sup, sub, small, strong, abbr, acronym, blockquote with cite attribute, city, q tag inside the two paragraphs.

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Q.5 Paragraphs</title>

</head>

<body>

  <p>

<h1>Management Colleges in Nepal</h1>

    <strong>Explore the best management colleges in Nepal offering diverse programs.</strong>

    <i>Quality education</i> is our priority.

    1<sup>st</sup>

    <small>Find your path to success.</small>

    <abbr title="Bachelor of Business Studies">BBS</abbr>

    and

    <abbr title="Master of Business Studies">MBS</abbr>

    programs available.

    <blockquote cite="https://www.education.com">

      "Education <sub>2</sub> is the most powerful weapon which you can use to change the world." -
      Nelson Mandela

    </blockquote>

    <q>
```

Wisdom begins in wonder.

## Engineering Colleges in Nepal

Discover top engineering colleges in Nepal with state-of-the-art facilities.

Unlock your potential with our engineering programs.

2nd

Shape the future through innovation.

**BE**

and

**ME**

courses offered.

<https://www.experience.com>

"The only source of knowledge is experience." - Albert Einstein

Science can amuse and fascinate us all, but it is engineering that changes the world.

## Management Colleges in Nepal

Explore the best management colleges in Nepal offering diverse programs. *Quality education* is our priority. 1<sup>st</sup> Find your path to success. BBS and MBS programs available.

"Education <sub>2</sub> is the most powerful weapon which you can use to change the world." - Nelson Mandela

"Wisdom begins in wonder."

## Engineering Colleges in Nepal

Discover top engineering colleges in Nepal with state-of-the-art facilities. *Unlock your potential* with our engineering programs. 2<sup>nd</sup> Shape the future through innovation. BE and ME courses offered.

"The only source of knowledge is experience." - Albert Einstein

"Science can amuse and fascinate us all, but it is engineering that changes the world."

## 6. Write the HTML code to display the following output:

Hi,  
My  
Name  
Is  
John

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.6 Pre text</title>
```

```
</head>
```

```
<body>
```

```
<pre>
```

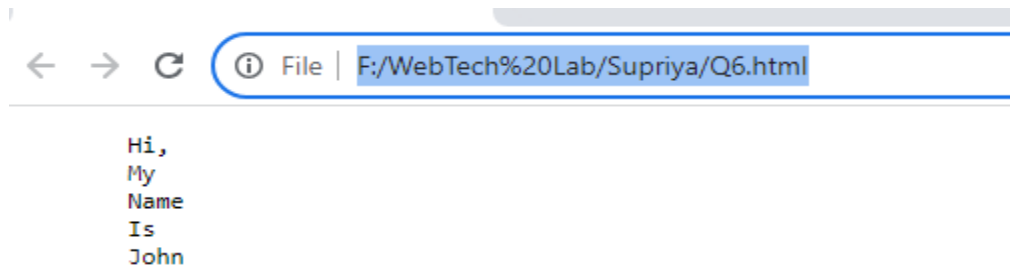
```
Hi,
```

```
My
```

```
Name
```

```
Is
```

```
John  
</pre>  
</body>  
</html>
```

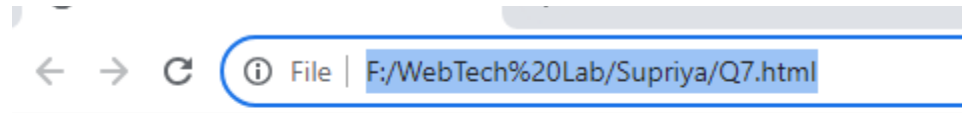


## 7. Write the HTML code to demonstrate:

- a. code
- b. kbd
- c. var
- d. samp

```
<!DOCTYPE html>  
  
<html>  
  
<head>  
  
<meta charset="UTF-8" />  
  
<meta name="viewport" content="width=device-width, initial-scale=1.0" />  
  
<title>Q.7 Ordered list</title>  
  
</head>  
  
<body>  
  
<ol type="a">  
  
<li>code</li>  
  
<li>kdb</li>  
  
<li>var</li>
```

```
<li>samp</li>
</ol>
</body>
</html>
```



- a. code
- b. kdb
- c. var
- d. samp

**8. Write a HTML code to demonstrate the concept of:**

- **Unordered list**
- **ordered list**
- **Nested unordered list**
- **Nested ordered list**
- **Definition list**

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.8 List</title>
```

```
</head>
```

```
<body>
```

```
<h2>Unordered List:</h2>
```

```
<ul>
```

```
<li>Item 1</li>
```

<li>Item 2</li>

</ul>

<h2>Ordered List:</h2>

<ol>

<li>First item</li>

<li>Second item</li>

</ol>

<h2>Nested Unordered List:</h2>

<ul>

<li>

Vegetables

<ul>

<li>Potato </li>

<li>Broccoli</li>

</ul>

</li>

<li>

Fruits

<ul>

<li>Grapes </li>

<li>Orange </li>

</ul>

</li>

</ul>



<h2>Nested Ordered List:</h2>

<ol>

<li>

School

<ol>

<li>Class 1</li>

<li>Class 2</li>

</ol>

</li>

<li>College</li>

<li>

University

<ol>

<li>Bachelor</li>

<li>Masters</li>

</ol>

</li>

</ol>

<h2>Definition List:</h2>

<dl>

<dt>HTML</dt>

<dd>HyperText Markup Language</dd>

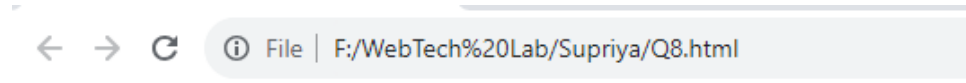
```
<dt>CSS</dt>

<dd>Cascading Style Sheets</dd>

</dl>

</body>

</html>
```



### **Unordered List:**

- Item 1
- Item 2

### **Ordered List:**

1. First item
2. Second item

### **Nested Unordered List:**

- Vegetables
  - Potato
  - Broccoli
- Fruits
  - Grapes
  - Orange

### **Nested Ordered List:**

1. School
  1. Class 1
  2. Class 2
2. College
3. University
  1. Bachelor
  2. Masters

### **Definition List:**

HTML  
HyperText Markup Language  
CSS

## 9. Write the HTML code to demonstrate image as list .

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.9 Image List</title>

</head>

<body>

  <h2>Image List (Unordered):</h2>

  <ul>

    <li></li>

    <li></li>

  </ul>

  <h2>Image List (Ordered):</h2>

  <ol>

    <li></li>

    <li></li>

  </ol>

</body>

</html>
```



**10. Write the HTML code to demonstrate the use of URL along with Absolute URL, Relative URL .**

```
<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.10 URL</title>

</head>

<body>

<h2>Absolute URL Example:</h2>

<p>

<a href="https://www.example.com" target="_blank">Visit Example.com</a>

</p>

<h2>Relative URL Example:</h2>

<p>
```

```
<a href="8_list.html">Go to a Relative Page</a>

</p>

<h2>Relative URL within Subdirectory:</h2>

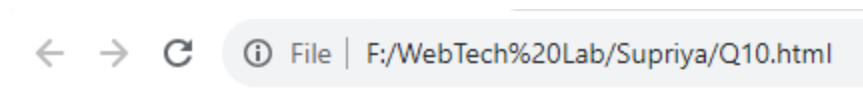
<p>

  <a href="subdirectory/another-page.html">Go to Another Page in Subdirectory</a>

</p>

</body>

</html>
```



## Absolute URL Example:

[Visit Example.com](#)

## Relative URL Example:

[Go to a Relative Page](#)

## Relative URL within Subdirectory:

[Go to Another Page in Subdirectory](#)

11. How can you create link in HTML? Show a proper section of code.

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.11 HTML Link</title>
```

```
</head>

<body>

  <h2>Create a Link in HTML:</h2>

  <p>

    Visit the

    <a href="https://www.example.com" target="_blank">example website</a>.

  </p>

</body>

</html>
```



## Create a Link in HTML:

Visit the [example website](#).

**12. Write the HTML code to generate the following output with the use of anchor tag:**

**[Home](#) [About](#) [Gallery](#)**

**The home is in parent directory , about is in sub directory of home and Gallery is in root directory. Write the code for each and every tabs**

```
<!DOCTYPE html>

<html>

  <head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Q.12 Navigation Tabs</title>

  </head>

  <style>
```

```

    nav li {

        display: inline;}

</style>

<body>

    <nav>

        <ul type="none">

            <li><a href=" ../home.html">Home</a></li>

            <li><a href=" ../about/home.html">About</a></li>

            <li><a href="/gallery.html">Gallery</a></li>

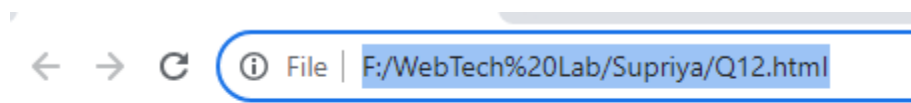
        </ul>

    </nav>

</body>

</html>

```



[Home](#) [About](#) [Gallery](#)

### 13. Create a web page that demonstrate the use of destination anchor using name and id attributes.

```

<!DOCTYPE html>

<html>

    <head>

        <meta charset="UTF-8" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Q.13 Destination Anchors</title>
    
```

```

</head>

<body>

  <h1>Destination Anchors Example</h1>

  <nav>

    <ul>

      <li><a href="#section1">Section 1</a></li>

      <li><a href="#section2">Section 2</a></li>

      <li><a href="#section3">Section 3</a></li>

    </ul>

  </nav>

  <section id="section1">

    <h2>Section 1</h2>

    <p>This is the content of Section 1.</p>

    <a name="section1"></a>

    <br /><br /><br /><br /><br /><br /><br />

  </section>

  <section id="section2">

    <h2>Section 2</h2>

    <p>This is the content of Section 2.</p>

    <a name="section2"></a>

    <br /><br /><br /><br /><br /><br /><br />

  </section>

  <section id="section3">

    <h2>Section 3</h2>

```



```
<p>This is the content of Section 3.</p>  
  
<a name="section3"></a>  
  
<!-- Destination anchor for older browsers -->  
  
</section>  
  
</body>  
  
</html>
```

# Destination Anchors Example

- [Section 1](#)
- [Section 2](#)
- [Section 3](#)

## Section 1

This is the content of Section 1.

## Section 2

This is the content of Section 2.

## Section 3

This is the content of Section 3.

---

### 14.Add image using img tag .

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```

<title>Q.14 Image</title>

</head>

<body>

  <h2>Image Example</h2>

</body>

</html>

```



## Image Example



**12. Create an image gallery of 9 images with 3 images in a row each having 200 width and height 250.**

```

<!DOCTYPE html>

<html>

  <head>

    <title>Q.15 Image Gallery</title>

  </head>

  <body>

    <h2>Image Gallery</h2>

    <p>

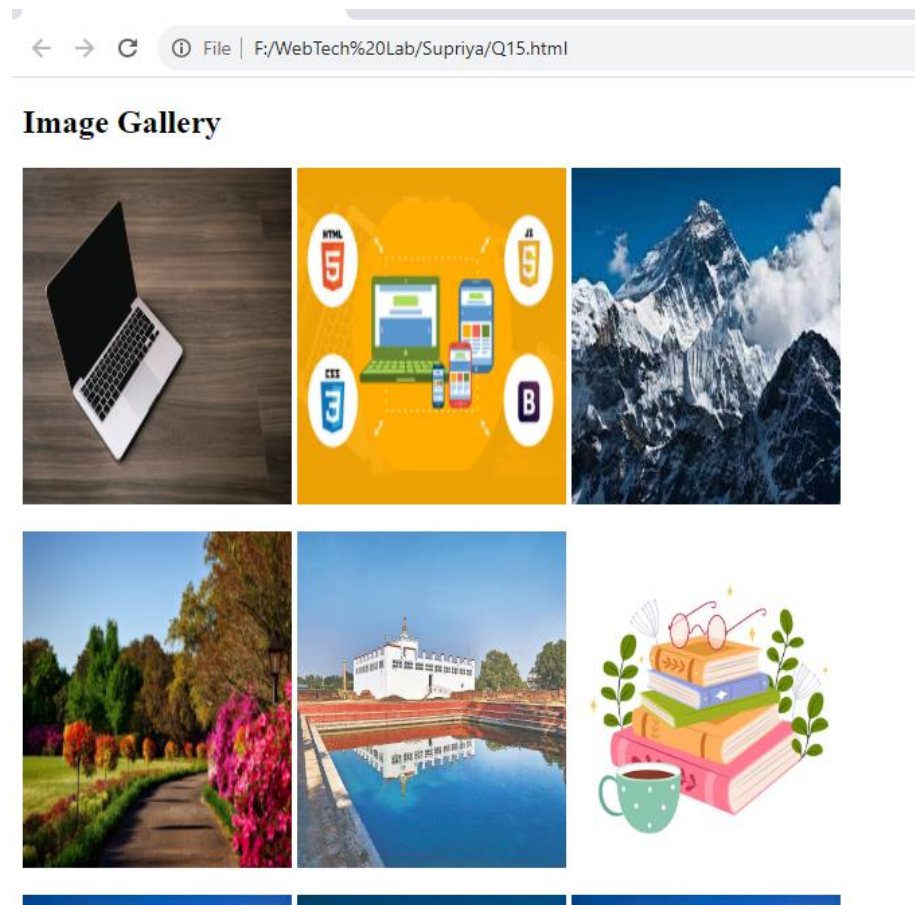
      </p>

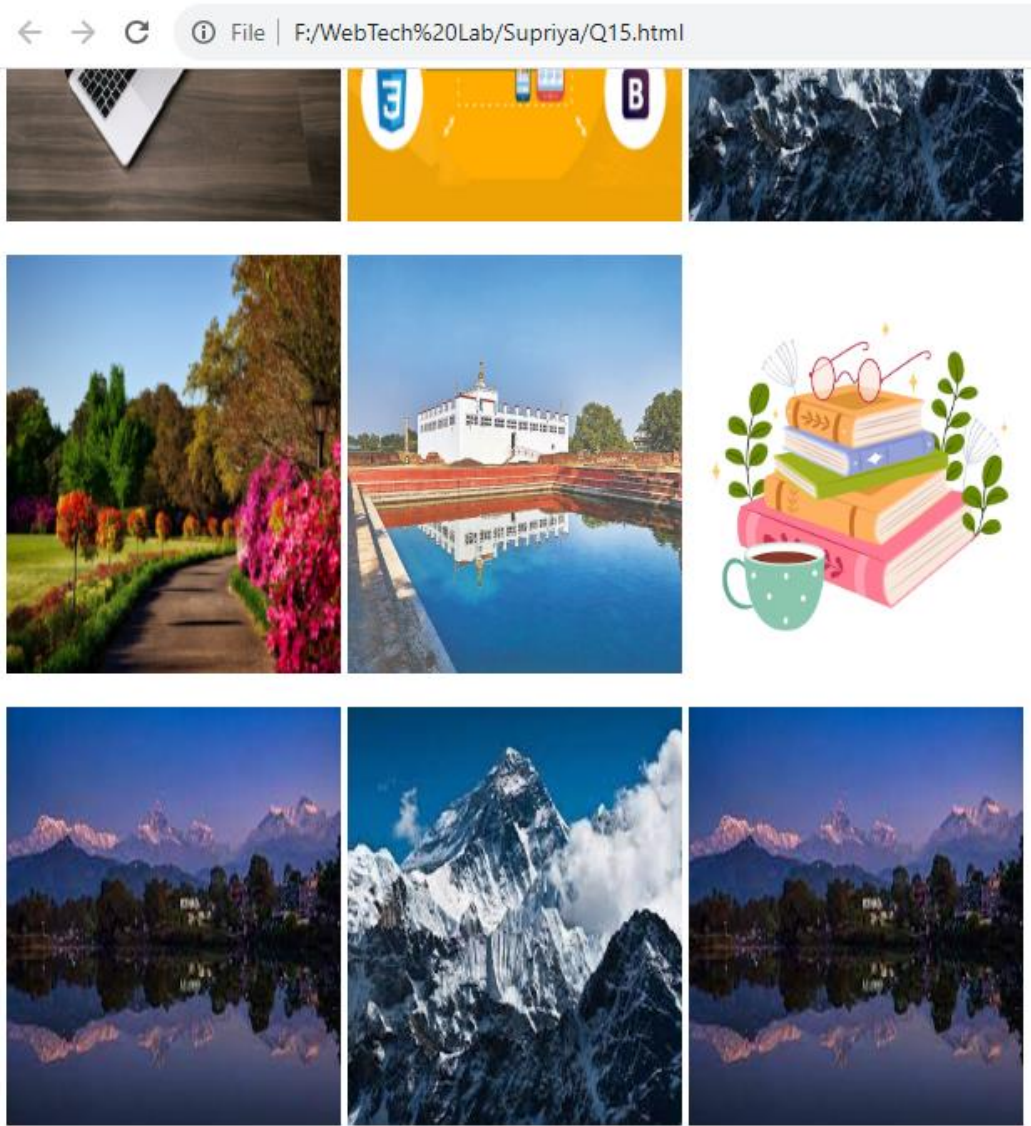
```

```

<p>
  
  
  
</p>
<p>
  
  
  
</p>
</body>
</html>

```





**16. Write a HTML code to map image as Client side and ServerSide.**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.16 Client-Side and Server-Side Image Map</title>
```

```
</head>
```

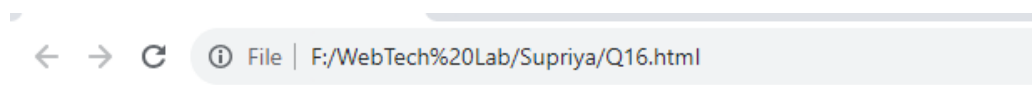
```
<body>
```

```

<h2>Click on the image to see client-side and server-side actions</h2>

<map name="workmap">
  <area
    shape="rect"
    coords="34,44,270,350"
    alt="Computer"
    href="computer.htm"
  />
  <area
    shape="rect"
    coords="290,172,333,250"
    alt="Phone"
    href="phone.htm"
  />
  <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm" />
</map>
</body>
</html>

```



**Click on the image to see client-side and server-side actions**



/

**17. Write a HTML code to demonstrate how audio, video can be added to the web pages along with all the attributes**

```
<!DOCTYPE html>

<html>

  <head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Q.17 Audio and Video</title>

  </head>

  <body>

    <!-- Audio Example -->

    <audio controls preload="auto" loop>

      <source src="audio-example.mp3" type="audio/mp3" />

      Your browser does not support the audio element.

    </audio>

    <!-- Video Example -->

    <video width="640" height="360" controls autoplay muted>

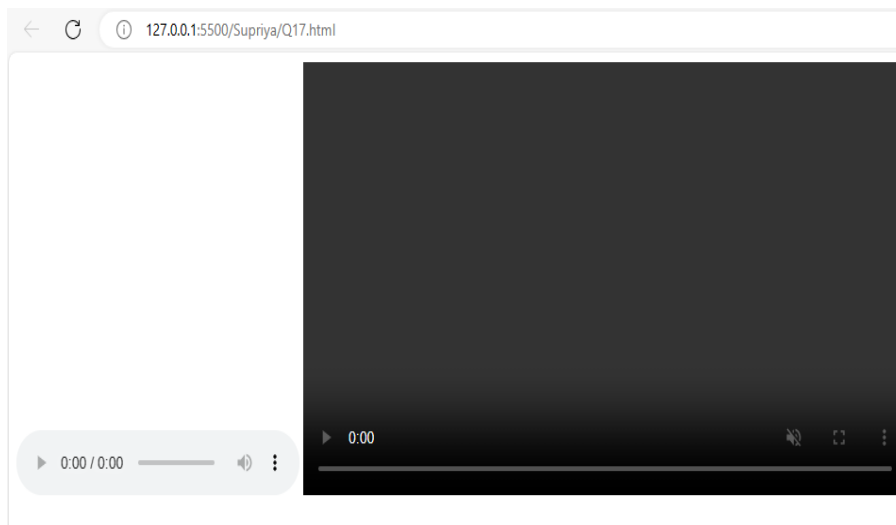
      <source src="video-example.mp4" type="video/mp4" />

      Your browser does not support the video element.

    </video>

  </body>

</html>
```



**18. Write the HTML code to print the following output: •**

SN	Name		College	Address	Email	Phone
	First Name	Last Name				

**Fill atleast 5 details**

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Q.18 Table</title>
</head>
<body>
  <table border="1" width="100%" cellpadding="10">
    <tr>
      <th rowspan="2">SN</th>
      <th colspan="2">Name</th>
      <th rowspan="2">College</th>
      <th rowspan="2">Address</th>
      <th rowspan="2">Email</th>
      <th rowspan="2">Phone</th>
    </tr>
    <tr>
      <th>First Name</th>
      <th>Last Name</th>
    </tr>
  </table>
  <table border="1" width="100%" cellpadding="10">
    <tr>
      <td>1</td>
      <td>Supriya</td>
      <td>Yadav</td>
      <td>ABC College</td>
      <td>123 Street</td>
      <td>supriya.yadav@gmail.com</td>
      <td>9876543210</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Ravi</td>
      <td>Sharma</td>
      <td>XYZ College</td>
      <td>456 Street</td>
      <td>ravi.sharma@gmail.com</td>
      <td>8765432109</td>
    </tr>
    <tr>
      <td>3</td>
      <td>Priya</td>
      <td>Singh</td>
      <td>PQR College</td>
      <td>789 Street</td>
      <td>priya.singh@gmail.com</td>
      <td>7654321098</td>
    </tr>
    <tr>
      <td>4</td>
      <td>Amit</td>
      <td>Kumar</td>
      <td>LMN College</td>
      <td>101 Street</td>
      <td>amit.kumar@gmail.com</td>
      <td>6543210987</td>
    </tr>
    <tr>
      <td>5</td>
      <td>Neha</td>
      <td>Verma</td>
      <td>OPQ College</td>
      <td>202 Street</td>
      <td>neha.verma@gmail.com</td>
      <td>5432109876</td>
    </tr>
  </table>
</body>
</html>
```



```

<th rowspan="2">College</th>
<th rowspan="2">Address</th>
<th rowspan="2">Email</th>
<th rowspan="2">Phone</th>
</tr>
<tr>
<th>First Name</th>
<th>Last Name</th>
</tr>
<tr>
<td>1</td>
<td>Supriya</td>
<td>Gupta</td>
<td>Balaju</td>
<td>Kathmandu</td>
<td>gsupriya@gmail.com</td>
<td>9841984198</td>
</tr>
<tr>
<td>2</td>
<td>Niharika</td>
<td>Sharma</td>
<td>Maitidevi</td>
<td>Kathmandu</td>
<td>nehaghy@gmail.com</td>
<td>9841984598</td>
</tr>
<tr>
<td>3</td>
<td>Binita</td>

```

Upadhyaya
Pulchowk
Lalitpur
binupa@gmail.com
9841984198

4
Niva
Maharjan
khusibu
Kathmandu
nivv@gmail.com
9841984198

5
Kabir
Saheb
satlok
Kathmandu
kabir@gmail.com
9841954198

SN	Name		College	Address	Email	Phone
	First Name	Last Name				
1	Supriya	Gupta	Balaju	Kathmandu	gsupriya073@gmail.com	9745632328
2	Niharika	Sharma	maitidevi	Kathmandu	nehaghy@gmail.com	9841984598
3	Binita	Upadhyaya	Pulchowk	Lalitpur	binupa@gmail.com	9841934598
4	Niva	Maharjan	khusibu	Kathmandu	nivv@gmail.com	9841984198
5	Kabir	Saheb	satlok	Kathmandu	kabir@gmail.com	9841954198

## 19. Write XHTML code to demonstrate the use of Nested table with rowspan and colspan attribute .

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">

<head>

<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>Q.19 XHTML</title>

</head>

<body>

<h2>Nested Table Example</h2>

<table border="1" cellspacing="0" cellpadding="5">

<tr>

<td rowspan="2">Row 1, Cell 1<br />Spanning 2 Rows</td>

<td colspan="2">Row 1, Cell 2 and 3<br />Spanning 2 Columns</td>

</tr>

<tr>
```

```

<td>Row 2, Cell 2</td>

<td>Row 2, Cell 3</td>

</tr>

<tr>

<td colspan="3">Row 3, Cell 1, 2, and 3<br />Spanning 3 Columns</td>

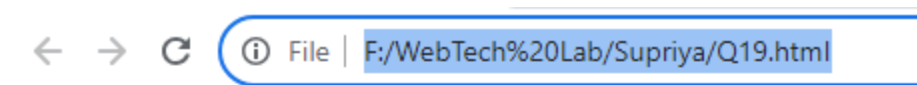
</tr>

</table>

</body>

</html>

```



## Nested Table Example

Row 1, Cell 1 Spanning 2 Rows	Row 1, Cell 2 and 3 Spanning 2 Columns	
	Row 2, Cell 2	Row 2, Cell 3
Row 3, Cell 1, 2, and 3 Spanning 3 Columns		

**20. Create a simple html page to demonstrate the basic structural tags of HTML.**

```

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

```

```
<title>Q.20 Basic HTML Structure</title>

</head>

<body>

  <header>

    <h1>Welcome to My Website</h1>

    <p>This is a simple demonstration of basic HTML structural tags.</p>

  </header>


  <nav>

    <ul>

      <li><a href="#">Home</a></li>

      <li><a href="#">About Us</a></li>

      <li><a href="#">Contact Us</a></li>

    </ul>

  </nav>


  <section>

    <h2>Section 1</h2>

    <p>This is the content of Section 1.</p>

  </section>


  <section>

    <h2>Section 2</h2>

    <p>This is the content of Section 2.</p>

  </section>

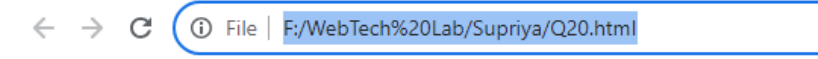

  <footer>
```

```
<p>&copy; 2024 My Website</p>

</footer>

</body>

</html>
```



# Welcome to My Website

This is a simple demonstration of basic HTML structural tags.

- [Home](#)
- [About Us](#)
- [Contact Us](#)

## Section 1

This is the content of Section 1.

## Section 2

This is the content of Section 2.

© 2024 My Website

### 21. Prepare an html page to display the syntax and usage of any 10 text formatting tags.

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.21 Text Formatting Tags Syntax and text formatting</title>

</head>

<body>

  <h1>Text Formatting Tags Examples</h1>
```

<section>

<h2>1. &lt;strong> - Strong Text</h2>

<p>

The <strong>strong</strong> tag is used for important text, often displayed as bold.

</p>

</section>

<section>

<h2>2. &lt;em> - Emphasized Text</h2>

<p>

The <em>emphasized</em> tag is used for text that should be emphasized, typically displayed as italicized.

</p>

</section>

<section>

<h2>3. &lt;u> - Underlined Text</h2>

<p>

The <u>underlined</u> tag is used for underlining text. It can also be used for hyperlinks.

</p>

</section>

<section>

<h2>4. &lt;s> - Strikethrough Text</h2>

<p>

The `<s>strikethrough</s>` tag is used for indicating deleted or no longer relevant text.

`</p>`

`</section>`

`<section>`

`<h2>5. &lt;sub>&gt; - Subscript Text</h2>`

`<p>`

The `<sub>subscript</sub>` tag is used for positioning text below the baseline.

`</p>`

`</section>`

`<section>`

`<h2>6. &lt;sup>&gt; - Superscript Text</h2>`

`<p>`

The `<sup>superscript</sup>` tag is used for positioning text above the baseline.

`</p>`

`</section>`

`<section>`

`<h2>7. &lt;mark>&gt; - Highlighted Text</h2>`

`<p>`

The `<mark>highlighted</mark>` tag is used for indicating text that has been highlighted or marked for reference.

`</p>`



</section>

<section>

<h2>8. &lt;abbr&gt; - Abbreviation</h2>

<p>

The <abbr title="HTML">HTML</abbr> tag is used for abbreviations or acronyms, providing a title attribute with the full form.

</p>

</section>

<section>

<h2>9. &lt;del&gt; - Deleted Text</h2>

<p>

The <del>deleted</del> tag is used for indicating deleted or removed text.

</p>

</section>

<section>

<h2>10. &lt;ins&gt; - Inserted Text</h2>

<p>

The <ins>inserted</ins> tag is used for indicating inserted or added text.

</p>

</section>

</body>

</html>

## Text Formatting Tags Examples

### 1. <strong> - Strong Text

The **strong** tag is used for important text, often displayed as bold.

### 2. <em> - Emphasized Text

The *emphasized* tag is used for text that should be emphasized, typically displayed as italicized.

### 3. <u> - Underlined Text

The underlined tag is used for underlining text. It can also be used for hyperlinks.

### 4. <s> - Strikethrough Text

The ~~strikethrough~~ tag is used for indicating deleted or no longer relevant text.

### 5. <sub> - Subscript Text

The <sub>subscript</sub> tag is used for positioning text below the baseline.

### 6. <sup> - Superscript Text

The <sup>superscript</sup> tag is used for positioning text above the baseline.

### 7. <mark> - Highlighted Text

The **highlighted** tag is used for indicating text that has been highlighted or marked for reference.

### 3. <u> - Underlined Text

The underlined tag is used for underlining text. It can also be used for hyperlinks.

### 4. <s> - Strikethrough Text

The ~~strikethrough~~ tag is used for indicating deleted or no longer relevant text.

### 5. <sub> - Subscript Text

The <sub>subscript</sub> tag is used for positioning text below the baseline.

### 6. <sup> - Superscript Text

The <sup>superscript</sup> tag is used for positioning text above the baseline.

### 7. <mark> - Highlighted Text

The **highlighted** tag is used for indicating text that has been highlighted or marked for reference.

### 8. <abbr> - Abbreviation

The HTML tag is used for abbreviations or acronyms, providing a title attribute with the full form.

### 9. <del> - Deleted Text

The ~~deleted~~ tag is used for indicating deleted or removed text.

### 10. <ins> - Inserted Text

The inserted tag is used for indicating inserted or added text.

**22. Create an html page to display your bio data using <pre> tag. (Do not use table).**

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Q.22 My Bio Data</title>
  </head>
  <body>
    <h1>My Bio Data</h1>
    <pre>
```

Name: Supriya Gupta

Age: 21

Location: Kathmandu, Nepal

Education:

- Bachelor of Science in Computer Science and Information Technology

Prime College

(2021 - Present)

Skills:

- Programming Languages: JavaScript, Python, Java, C, C++, PHP, SQL

- Web Development: HTML, CSS, React, Node.js, Spring Boot

- Database: MongoDB, MySQL

- Other: Git, Agile Methodology

Work Experience:

- Software Developer

XYZ Tech Solutions

(2018 - Present)

Projects:

1. E-commerce Website

- Developed a responsive e-commerce website using React and Node.js.

## 2. Task Management App

- Created a task management application with features for tracking and organizing tasks.

Achievements:

- Received Best Employee Award at XYZ Tech Solutions (2020).

Contact:

Email: gsupriya073@gmail.com

Phone: +977 9812866418

</pre

>

</body>

</html>

← → ↻ ⓘ File | F:/WebTech%20Lab/Supriya/Q22.html

## My Bio Data

Name: Supriya Gupta

Age: 21

Location: Kathmandu, Nepal

Education:

- Bachelor of Science in Computer Science and Information Technology  
Prime College  
(2021 - Present)

Skills:

- Programming Languages: JavaScript, Python, Java, C, C++, PHP, SQL
- Web Development: HTML, CSS, React, Node.js, Spring Boot
- Database: MongoDB, MySQL
- Other: Git, Agile Methodology

Work Experience:

- Software Developer  
XYZ Tech Solutions  
(2018 - Present)

Projects:

1. E-commerce Website
  - Developed a responsive e-commerce website using React and Node.js.
2. Task Management App
  - Created a task management application with features for tracking and organizing tasks.

Achievements:

- Received Best Employee Award at XYZ Tech Solutions (2020).

Contact:

Email: gsupriya073@gmail.com

Phone: +977 9812866418

**23. Create an html page to write brief description about your college using header tags, paragraph tag and text formatting tags.**

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.23 College Description</title>

</head>

<body>

  <h1>Welcome to <em>Prime College</em></h1>

  <p>

    <strong>Prime College</strong> is a premier institution dedicated to
    providing a transformative education experience. Our commitment to
    excellence, innovation, and inclusivity sets us apart as a hub for
    academic and personal growth.

  </p>

  <h2>About <em>Prime College</em></h2>

  <p>

    Established in <strong>19XX</strong>, <em>Prime College</em> has been a
    cornerstone of education in our community. Our state-of-the-art campus,
    experienced faculty, and diverse student body create a dynamic learning
    environment.

  </p>

  <h2>Academic Programs</h2>

  <p>

    At <em>Prime College</em>, we offer a wide range of academic programs to
    suit the interests and aspirations of our students. Whether it's in the
    sciences, humanities, or business, our programs are designed to foster
    critical thinking and practical skills.
```

</p>

## <h2>Facilities and Resources</h2>

<p>

Our college boasts <em>modern facilities</em>, including well-equipped classrooms, laboratories, libraries, and recreational spaces. We are committed to providing students with the resources they need to excel academically and personally.

</p>

## <h2>Extracurricular Activities</h2>

<p>

Beyond academics, <em>Prime College</em> encourages students to engage in various <strong>extracurricular activities</strong>. From sports to cultural events, clubs, and community service, we believe in nurturing well-rounded individuals who contribute meaningfully to society.

</p>

## <h2>Join Us on the Journey</h2>

<p>

If you are seeking an enriching educational experience that goes beyond textbooks, <em>Prime College</em> is the place for you. Join us on the journey of knowledge, growth, and lifelong friendships.

</p>

</body>

</html>

## Welcome to *Prime College*

**Prime College** is a premier institution dedicated to providing a transformative education experience. Our commitment to excellence, innovation, and inclusivity sets us apart as a hub for academic and personal growth.

### About *Prime College*

Established in 19XX, *Prime College* has been a cornerstone of education in our community. Our state-of-the-art campus, experienced faculty, and diverse student body create a dynamic learning environment.

### Academic Programs

At *Prime College*, we offer a wide range of academic programs to suit the interests and aspirations of our students. Whether it's in the sciences, humanities, or business, our programs are designed to foster critical thinking and practical skills.

### Facilities and Resources

Our college boasts *modern facilities*, including well-equipped classrooms, laboratories, libraries, and recreational spaces. We are committed to providing students with the resources they need to excel academically and personally.

### Extracurricular Activities

Beyond academics, *Prime College* encourages students to engage in various **extracurricular activities**. From sports to cultural events, clubs, and community service, we believe in nurturing well-rounded individuals who contribute meaningfully to society.

### Join Us on the Journey

If you are seeking an enriching educational experience that goes beyond textbooks, *Prime College* is the place for you. Join us on the journey of knowledge, growth, and lifelong friendships.

## 24. Create an image gallery of any three popular places in Nepal along with their short description with the images aligned in left or right.

```
<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.24 Nepal Places Gallery</title>

</head>

<body>

<h1>Popular Places in Nepal</h1>

<div>



<h3>Mount Everest</h3>

<p>

The highest peak in the world, Mount Everest is a majestic Himalayan

giant attracting adventurers and mountaineers from around the globe.




```

```
</p>
</div>

<div>
  
  <h3>Phewa Lake, Pokhara</h3>
  <p>
    Surrounded by the Annapurna range, Phewa Lake is a serene freshwater
    lake in Pokhara, offering stunning views and boat rides.
  </p>
</div>

<div>
  
  <h3>Boudhanath Stupa</h3>
  <p>
    A UNESCO World Heritage Site, Boudhanath Stupa is one of the largest
    stupas in the world and a significant pilgrimage site for Buddhists.
  </p>
</div>
</body>
</html>
```



## Popular Places in Nepal



### Pashupatinath Temple

Pashupatinath Temple, place of worship in the Kathmandu Valley on the Bagmati River, on the eastern outskirts of the city of Kathmandu, that is the holiest site in Nepal.



### Phewa Lake, Pokhara

Surrounded by the Annapurna range, Phewa Lake is a serene freshwater lake in Pokhara, offering stunning views and boat rides.



## 25. Demonstrate the use of align, vspace and hspace attribute using minimum of six images. (Make a gallery)

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.25 Image Gallery</title>
```

```
</head>
```

```
<body>
```

```
<h1>Image Gallery</h1>
```

```

```

```



<br />





<br />

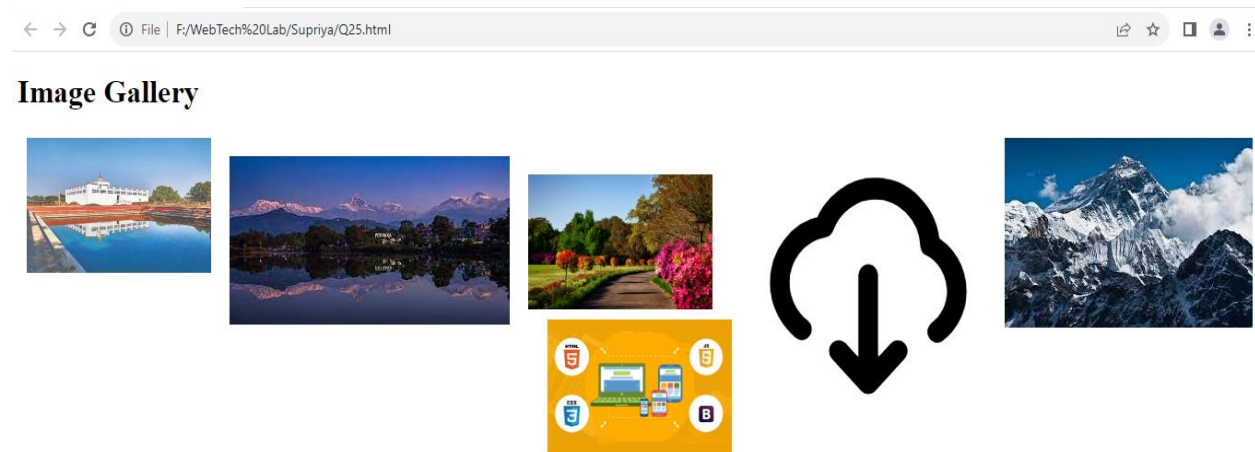




</body>

</html>

```



**26. Create a webpage to containing brief description about your college and links to your college and university website.**

```

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

```

```
<title>Q.26 Prime College</title>

</head>

<body>

  <h1>Welcome to Prime College</h1>

  <p>
```

Prime College is an educational institution striving to deliver practical-based education, empowering young minds and cultivating a culture of excellence among skilled individuals. We offer diverse academic programs at both undergraduate and graduate levels. Our dedicated faculty members bring their extensive expertise to the classroom, fostering a dynamic learning environment.

```
</p>

<p>

  Explore more about Prime College:

</p>

<ul>

  <li>

    <a href="https://www.prime.edu.np" target="_blank"

      >Prime College Website</a >

    </li>

    <li>

      <a href="https://tu.edu.np/" target="_blank"

        >Tribhuvan University Website</a>

    </li>

  </ul>

</body>
```

</html>



## Welcome to Prime College

Prime College is an educational institution striving to deliver practical-based education, empowering young minds and cultivating a culture of excellence among skilled individuals. We offer diverse academic programs at both undergraduate and graduate levels. Our dedicated faculty members bring their extensive expertise to the classroom, fostering a dynamic learning environment.

Explore more about Prime College:

- [Prime College Website](#)
- [Tribhuvan University Website](#)

### 27. Demonstrate the use of top to bottom and bottom to top link using anchor tags.

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Qn.27 Anchor tags</title>

</head>

<body>

<div class="content">

<p><a href="#bottom">Go to bottom</a></p>

<h1 id="top">This is some long content that scrolls down.</h1>

<p style="margin-bottom: 500px;">

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nulla facilisi

morbi tempus iaculis urna id volutpat. Aenean euismod bibendum laoreet.

Maecenas aliquam, justo quis rhoncus ultricies, ligula metus facilisis

nunc, sed mattis libero tortor. Donec non libero ut ante porta molestie. Duis a mi quam. Fusce sem purus, aliquam quis blandit eu, tincidunt et velit. Pellentesque habitant morbi tristique sem, et ullamcorper nibh diam varius condimentum. Nunc sed diam lectus. Morbi a magna at nibh venenatis laoreet. Curabitur semper nunc velit, eget varius tellus aliquet sed. Fusce et diam euismod sem dapibus auctor. Nunc velit risus, eleifend eget tincidunt vitae, suscipit eget massa. Pellentesque habitant morbi tristique sem, et ullamcorper nibh diam varius condimentum. Nunc sed diam lectus. Morbi a magna at nibh venenatis laoreet.

</p>

<h2 id="bottom">This is some long content that scrolls up.</h2>

<p style="margin-bottom: 100px;">

Lorem ipsum dolor sit amet consectetur adipisicing elit. Facilis porro ipsa expedita, tempore minima debitis officiis quod deserunt eum explicabo voluptatibus consectetur dicta, exercitationem nobis quis. Corrupti saepe est mollitia eveniet a quod, facere dolorum aut provident, sit quia iusto, vero iste veniam non nam! Vero animi iusto voluptates eius autem commodi esse mollitia reiciendis ipsa eaque dolores cupiditate voluptatem consequuntur perferendis, maxime voluptatum soluta. Perferendis aut atque aliquam ipsum harum quibusdam natus vel est unde, quis ducimus expedita sunt fugiat quos minima. Doloribus quidem voluptatem cum iste quo, aut veniam itaque fugit velit

accusamus adipisci illum ipsa dicta. Magnam.

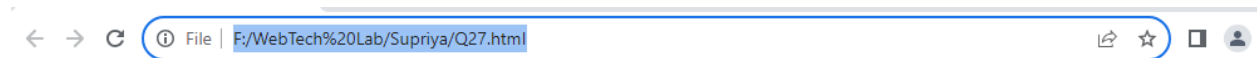
</p>

<p><a href="#top">Go to top</a></p>

</div>

</body>

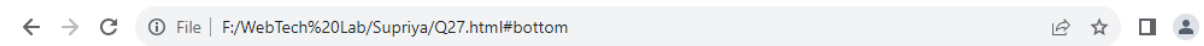
</html>



[Go to bottom](#)

## This is some long content that scrolls down.

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Nulla facilisi morbi tempus iaculis urna id volutpat. Aenean euismod bibendum laoreet. Maecenas aliquam, justo quis rhoncus ultricies, ligula metus facilisis nunc, sed mattis libero tortor. Donec non libero ut ante porta molestie. Duis a mi quam. Fusce sem purus, aliquam quis blandit eu, tincidunt et velit. Pellentesque habitant morbi tristique sem, et ullamcorper nibh diam varius condimentum. Nunc sed diam lectus. Morbi a magna at nibh venenatis laoreet. Curabitur semper nunc velit, eget varius tellus aliquet sed. Fusce et diam euismod sem dapibus auctor. Nunc velit risus, eleifend eget tincidunt vitae, suscipit eget massa. Pellentesque habitant morbi tristique sem, et ullamcorper nibh diam varius condimentum. Nunc sed diam lectus. Morbi a magna at nibh venenatis laoreet.



## This is some long content that scrolls up.

Lorem ipsum dolor sit amet consectetur adipisicing elit. Facilis porro ipsa expedita, tempore minima debitis officiis quod deserunt eum explicabo voluptatibus consectetur dicta, exercitationem nobis quis. Corrupti saepe est mollitia eveniet a quod, facere dolorum aut provident, sit quia iusto, vero iste veniam non nam! Vero animi iusto voluptates eius autem commodi esse mollitia reiciendis ipsa eaque dolores cupiditate voluptatem consequuntur perferendis, maxime voluptatum soluta. Perferendis aut atque aliquam ipsum harum quibusdam natus vel est unde, quis ducimus expedita sunt fugiat quos minima. Doloribus quidem voluptatem cum iste quo, aut veniam itaque fugit velit accusamus adipisci illum ipsa dicta. Magnam.

[Go to top](#)

## 28. Create the following list using html.

1. BSCIT
2. MSCIT
  - a. Semester 1
    - Subject 1
    - Subject 2
    - Subject 3
  - b. Semester 2
  - c. Semester 3
3. BScNT

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.28 List</title>
```

```
</head>
```

```
<body>
```

```
<ol>
```

```
<li>BSCIT</li>
```

```
<li>MSCIT
```

```
<ol type="a">
```

```
<li>
```

```
Semester 1
```

```
<ul>
```

```
<li>Subject 1</li>
```

```
<li>Subject 2</li>
```

```
<li>Subject 3</li>
```

```

        </ul>

    </li>

    <li>Semester 2</li>

    <li>Semester 3</li>

</ol>

</li>

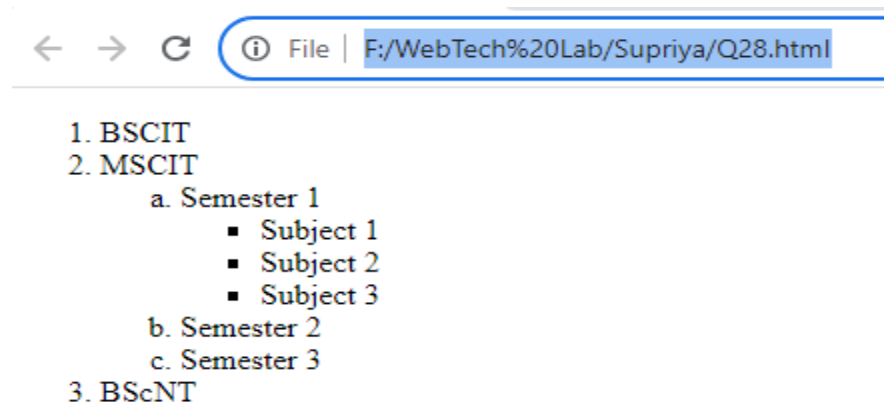
<li>BScNT</li>

</ol>

</body>

</html>

```



## 29. Create the following list using html.

- A. Movies**
  - i. Nepali**
  - ii. Hindi**
  - iii. English**
- B. Music**
- C. Travel**
- D. Reading**
- E. Social Networking**
- F. Chatting**

```

<!DOCTYPE html>
<html>
<head>

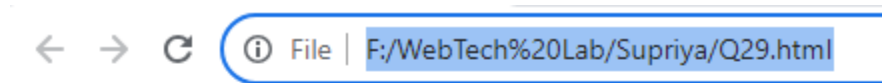
```



```

<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Q.29 List</title>
</head>
<body>
  <ol type="A">
    <li>
      Movies
      <ol type="i">
        <li>Nepali</li>
        <li>Hindi</li>
        <li>English</li>
      </ol>
    </li>
    <li>Reading</li>
    <li>Music</li>
    <li>Travel</li>
    <li>Social Networking</li>
    <li>Chatting</li>
  </ol>
</body>
</html>

```



```

A. Movies
    i. Nepali
    ii. Hindi
    iii. English
B. Reading
C. Music
D. Travel
E. Social Networking
F. Chatting

```

**30. Design the following single table using HTML.**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
			<b>F</b>
<b>E</b>			<b>G</b>

**H            J            K**

**L                    M**

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Qn.30 Table</title>
```

```
</head>
```

```
<body>
```

```
<table border="1" width="50%" cellpadding="5">
```

```
<tr>
```

```
<td>A</td>
```

```
<td style="border-right: none;">B</td>
```

```
<td style="border-left: none;"></td>
```

```
<td>C</td>
```

```
<td>D</td>
```

```
</tr>
```

```
<tr>
```

```
<td colspan="4" rowspan="2" style="vertical-align: text-top;">E</td>
```

```
<td>F</td>
```

```
</tr>
```

```

<tr>

<td>G</td>

</tr>

<tr>

<td colspan="2">H</td>

<td colspan="2">J</td>

<td>K</td>

</tr>

<tr>

<td colspan="3">L</td>

<td colspan="2">M</td>

</tr>

</table>

</body>

</html>

```

A	B	C	D
E			F
			G
H	J	K	
L		M	

**31. Design the following table using nested tables in HTML. • [Code](#)**

**Logo (image) ABC Company:**

**Home(link)**

**About Us(link)**

**Contact Us(link)**

**Content 1 News 1 Content 2 News 2**

Copyright Facebook, Twitter(link) Powered By

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Qn.31 Nested Tables</title>
```

```
</head>
```

```
<body>
```

```
<table border="1" width="100%" cellpadding="5" cellspacing="0">
```

```
<tr>
```

```
<th>
```

```

```

```
</th>
```

```
<th>ABC Company</th>
```

```
</tr>
```

```
<tr>
```

```
<td>
```

```
<table border="1" width="90%" cellpadding="5" cellspacing="0" align="center" style="margin-top: 10px;"
```

```
<tr>
```

```
<td><a href="#">Home</a></td>
```

```
</tr>
```

```
<tr>
```

```
<td><a href="#">About Us</a></td>
```

```
</tr>
```

```
<tr>
```

```
<td><a href="#">Contact Us</a></td>
```

```
</tr>
```

```
</table>
```

```
</td>
```

```
<td>
```

```
<table border="1" width="90%" cellpadding="5" cellspacing="0">
```

```
<tr>
```

```
<td>Content 1</td>
```

```
<td>News 1</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Content 2</td>
```

```
<td>News 2</td>
```

```
</tr>
```

```
</table>
```

```

</td>

</tr>

<tr>

<td>Copyright</td>

<td>

<table border="1" width="100%" cellpadding="5" cellspacing="0">

<tr>

<td>

<a href="#">Facebook</a>, <a href="#">Twitter</a>

</td>

<td>

Powered By

</td>

</tr>

</table>

</td>

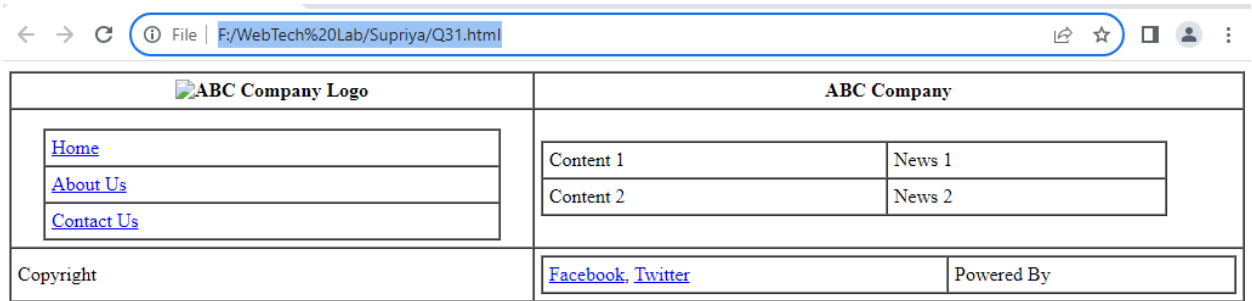
</tr>

</table>

</body>

</html>

```



### 32. Design an html form to demonstrate the 10 different types of generated using INPUT tag.

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Qn.32 10 Different types of controls generated by Input tag</title>

</head>

<body>

  <h2>HTML Form with Different Input Types</h2>

  <form action="#" method="POST">

    <!-- Text Input -->

    <label for="text-input">Text Input:</label>

    <input type="text" id="text-input" name="text-input" placeholder="Enter text"><br><br>

    <!-- Password Input -->

    <label for="password-input">Password Input:</label>

    <input type="password" id="password-input" name="password-input" placeholder="Enter password"><br><br>
```

<!-- Radio Buttons -->

<label>Radio Buttons:</label><br>

<input type="radio" id="radio1" name="radio-group" value="option1">

<label for="radio1">Option 1</label>

<input type="radio" id="radio2" name="radio-group" value="option2">

<label for="radio2">Option 2</label><br><br>

<!-- Checkboxes -->

<label>Checkboxes:</label><br>

<input type="checkbox" id="checkbox1" name="checkbox1" value="checkbox1">

<label for="checkbox1">Checkbox 1</label>

<input type="checkbox" id="checkbox2" name="checkbox2" value="checkbox2">

<label for="checkbox2">Checkbox 2</label><br><br>

<!-- Number Input -->

<label for="number-input">Number Input:</label>

<input type="number" id="number-input" name="number-input" min="1" max="10"><br><br>

<!-- Date Input -->

<label for="date-input">Date Input:</label>

<input type="date" id="date-input" name="date-input"><br><br>

<!-- Color Input -->



```
<label for="color-input">Color Input:</label>

<input type="color" id="color-input" name="color-input"><br><br>

<!-- File Input -->

<label for="file-input">File Input:</label>

<input type="file" id="file-input" name="file-input"><br><br>

<!-- Range Input -->

<label for="range-input">Range Input:</label>

<input type="range" id="range-input" name="range-input" min="0" max="100"><br><br>

<!-- Email Input -->

<label for="email-input">Email Input:</label>

<input type="email" id="email-input" name="email-input" placeholder="Enter
email"><br><br>

<!-- Submit Button -->

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

</form>

</body>

</html>
```

## HTML Form with Different Input Types

Text Input:

Password Input:

Radio Buttons:

☐ Option 1 ☐ Option 2

Checkboxes:

☐ Checkbox 1 ☐ Checkbox 2

Number Input:

Date Input:  

Color Input:

File Input:  No file chosen

Range Input:

Email Input:

33. Design an html form to submit a job application form. Demonstrate use of drop-down list, text areas and file upload control.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```

<title>Qn.33 Submit a job application form</title>

</head>

<body>

<h1>Job Application Form</h1>

<form action="#" method="post" enctype="multipart/form-data">

<p>

<label for="name">Full Name:</label>

<input type="text" id="name" name="name" placeholder="Enter your full name" required/>

</p>

<p>

<label for="email">Email Address:</label>

<input type="email" id="email" name="email" placeholder="Enter your valid email address" required/>

</p>

<p>

<label for="phone">Phone Number:</label>

<input type="tel" id="phone" name="phone" placeholder="Enter your phone number"/>

</p>

<p>

<label for="position">Job Position:</label>

<select name="position" id="position" required>

<option value="">-- Please select a position --</option>

<option value="developer">Software Developer</option>

<option value="designer">Graphic Designer</option>

<option value="writer">Content Writer</option>


```

```

        <option value="other">Other</option>

    </select>

</p>

<p>

    <label for="experience">Years of Experience:</label>

    <input type="number" id="experience" name="experience" min="0" placeholder="Enter
your years of experience"/>

</p>

<p>

    <label for="skills">Skills and Technologies:</label>

    <textarea name="skills" id="skills" rows="5" placeholder="List your relevant skills and
technologies"></textarea>

</p>

<p>

    <label for="resume">Upload Resume (PDF or DOCX):</label>

    <input type="file" id="resume" name="resume" accept="application/pdf,.docx" required/>

</p>

<p>

    <label for="cover_letter">Cover Letter (Optional):</label>

    <textarea name="cover_letter" id="cover_letter" rows="5" placeholder="Write a brief cover
letter (optional)"></textarea>

</p>

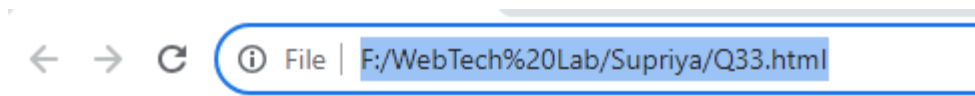
    <button type="submit">Submit Application</button>

</form>

</body>

</html>

```



# Job Application Form

Full Name:

Email Address:

Phone Number:

Job Position:

Years of Experience:

Skills and Technologies:

Upload Resume (PDF or DOCX):  No file chosen

Cover Letter (Optional):

## LAB 2(CSS)

### 1. Illustrate the use of background properties in CSS (for image).

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```

<title>Q.1 Background Image</title>

<style>

  body {

    background-image: url('images/pokhara.jpg');

    background-size: cover;

    background-repeat: no-repeat;

    background-position: center center;}

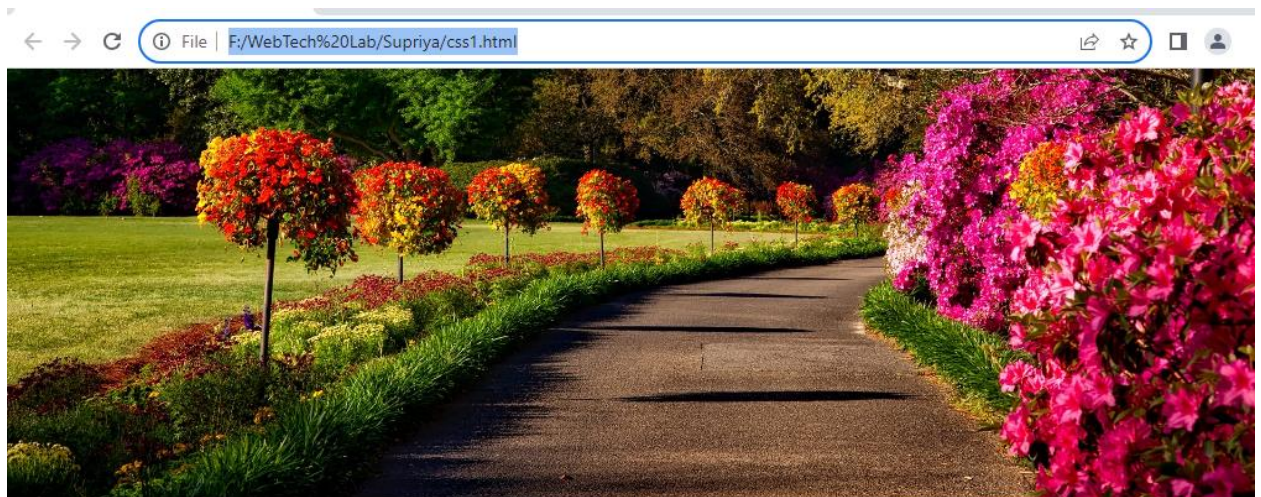
</style>

</head>

<body></body>

</html>

```



## 2. Construct a web page with four paragraph and style using CSS.

```

<!DOCTYPE html>

<html>

  <head>

```

```
<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.2 Styled Paragraphs</title>

<style>

  p {

    color: #2fa52b;

    font-size: 16px;

    line-height: 1.5;

    margin-bottom: 20px;

    font-weight: 900;

  }

</style>

</head>

<body>

  <p>This is paragraph 1.</p>

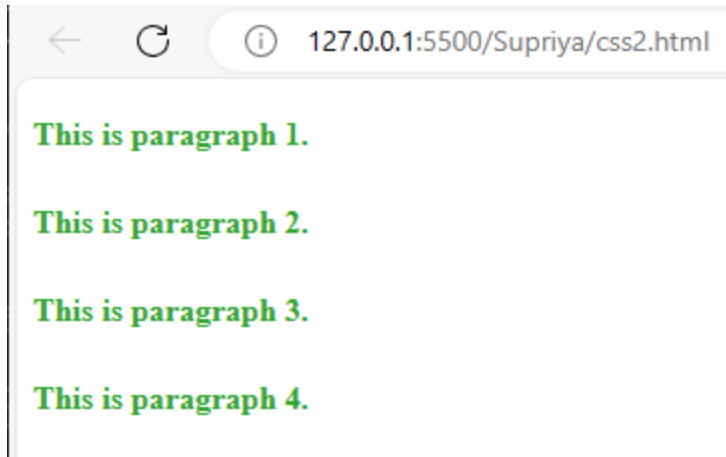
  <p>This is paragraph 2.</p>

  <p>This is paragraph 3.</p>

  <p>This is paragraph 4.</p>

</body>

</html>
```



### 3. Design a web page with six images and style them using external CSS.

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.3 Image Gallery</title>

  <link rel="stylesheet" href="styles.css" />

</head>

<body>

  <div class="image-container">

  </div>
```



```

</body>

</html>

.image-container {

    display: flex;

    justify-content: space-between;

    align-items: center;

}

.image-container img {

    width: 150px;

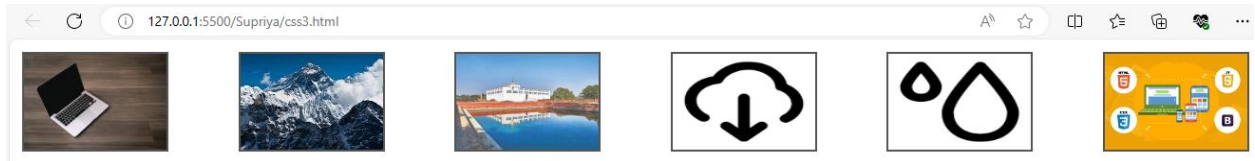
    height: 100px;

    border: 2px solid #555;

    margin: 5px;

}

```



#### 4. Make a nested list using internal CSS.

```

<!DOCTYPE html>

<html>

<head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Q.4 Nested List</title>

    <style>

```

```

    ul {
        list-style-type: square;
    }

    ul ul {
        list-style-type: circle;
        margin-left: 20px;}
ul ul ul {
    list-style-type: disc;
    margin-left: 40px;
}
</style>
</head>
<body>
<ul>
    <li>List item 1</li>
    <li>
        List item 2
        <ul>
            <li>Sub-item 2.1</li>
            <li>
                Sub-item 2.2
                <ul>
                    <li>Sub-sub-item 2.2.1</li>
                    <li>Sub-sub-item 2.2.2</li>

```

```

        </ul>

    </li>

</ul>

</li>

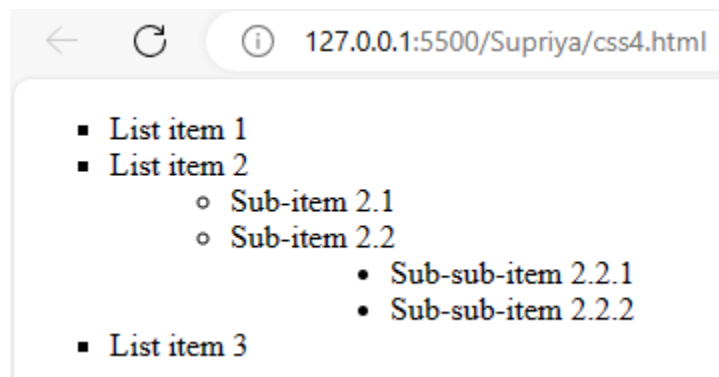
<li>List item 3</li>

</ul>

</body>

</html>

```



**5. Make a web page having 3 rows and 2 columns with all the hyperlinks and style it using external CSS.**

```

<!DOCTYPE html>

<html>

<head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Q.5 Links Page</title>

    <link rel="stylesheet" href="styles2.css" />

</head>

<body>

```

```
<div class="link-grid">

  <a href="#">Link 1</a>

  <a href="#">Link 2</a>

  <a href="#">Link 3</a>

  <a href="#">Link 4</a>

  <a href="#">Link 5</a>

  <a href="#">Link 6</a>

</div>

</body>

</html>

.link-grid {

  display: grid;

  grid-template-columns: repeat(2, 1fr);

  grid-template-rows: repeat(3, auto);

  gap: 10px;

}

a {

  display: block;

  padding: 10px;

  background-color: #3498db;

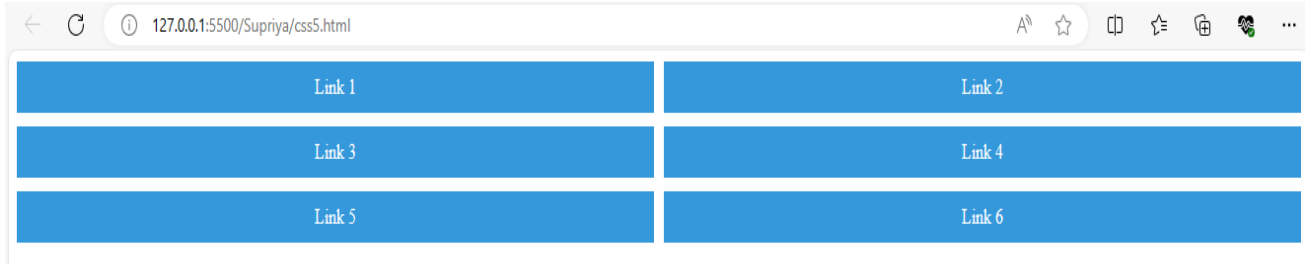
  color: #fff;

  text-decoration: none;

  text-align: center;

}
```

```
a:hover {
    background-color: #2980b9;
}
```



**6. Design an html form to demonstrate the 10 different types of controls generated using INPUT tag. Style the form as:**

- Set the background color of textbox yellow when it is focused.
- Change the text color blue to textbox.
- Increase the height of combo options when it is checked.
- Set the border color red if the input is invalid in textbox textarea.
- Set green border to valid input.
- Design the form using fieldset.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.6 Styled Form</title>
```

```
<style>
```

```
body {
```

```
font-family: Arial, sans-serif;
```

```
}
```

```
fieldset {  
  
    border: 2px solid #333;  
  
    padding: 10px;  
  
    margin: 20px;  
  
    width: 300px;  
  
}  
  
label {  
  
    display: block;  
  
    margin-bottom: 5px;  
  
}  
  
input[type='text']:focus,  
textarea:focus {  
  
    background-color: yellow;  
  
    color: blue;  
  
}  
  
select:checked {  
  
    height: 150px;  
  
}  
  
input:invalid,  
textarea:invalid {  
  
    border: 2px solid red;  
  
}  
  
input:valid,  
textarea:valid {
```

```

        border: 2px solid green;

    }

    input,

    textarea,

    select {

        margin-bottom: 10px;

        width: 100%;

        padding: 8px;

        box-sizing: border-box;

    }

    input[type='checkbox'] {

        width: auto;

        margin-right: 5px;

    }

</style>

</head>

<body>

<form>

    <fieldset>

        <legend>Styled Form Controls</legend>

        <label for="text">Text:</label>

        <input type="text" id="text" required />

        <label for="email">Email:</label>

        <input type="email" id="email" required />

```

```
<label for="password">Password:</label>

<input type="password" id="password" required />

<label for="checkbox">Checkbox:</label>

<input type="checkbox" id="checkbox" />

<label for="select">Select:</label>

<select id="select" required>

  <option value="option1">Option 1</option>

  <option value="option2">Option 2</option>

  <option value="option3">Option 3</option>

</select>

<label for="textarea">Textarea:</label>

<textarea id="textarea" rows="4" required></textarea>

<label for="date">Date:</label>

<input type="date" id="date" required />

<label for="number">Number:</label>

<input type="number" id="number" required />

<label for="color">Color:</label>

<input type="color" id="color" required />

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

</fieldset>

</form>

</body>

</html>
```



Styled Form Controls

Text:

Email:

Password:

Select:

Option 1 ▾

Textarea:

Date:

mm/dd/yyyy 📅

Number:

Color:

Submit

## 7. Design the given table and style as:

**Class A      Class B**

**Class C      Class D**

- Set the border of any style and color.
- Set width of all Classes 600 pixel and height 550 pixel.
- Set different background color for all classes.
- Every text color should be different.
- Display Class C and Class D in uppercase and remaining in lower case.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.7 Styled Table</title>
```

```
<style>
```

```
table {
```

```
border: 2px solid #333;
```

```
width: 600px;
```

```
height: 550px;
```

```
border-collapse: collapse;
```

```
}
```

```
th,
```

```
td {
```

```
border: 2px solid #333;
```

```
padding: 10px;
```

```
    text-align: center;
}

.classA {
    background-color: #ffcc00;
    color: #990000;
}

.classB {
    background-color: #66ccff;
    color: #003366;
}

.classC {
    background-color: #99ff99;
    color: #006600;
    text-transform: uppercase;
}

.classD {
    background-color: #ff9999;
    color: #cc0000;
    text-transform: uppercase;
}

</style>

</head>

<body>

<table>
```

```
<tr>

  <th class="classA">Class A</th>

  <th class="classB">Class B</th>

</tr>

<tr>

  <td class="classC">Class C</td>

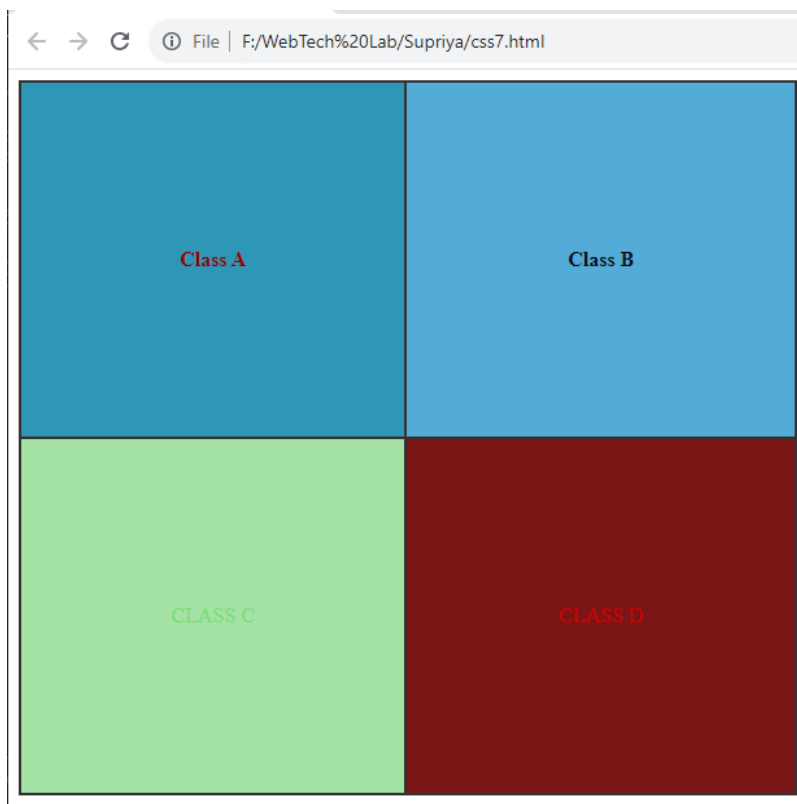
  <td class="classD">Class D</td>

</tr>

</table>

</body>

</html>
```



## 8. Design a horizontal menu of any five options and style as:

- Set border for all links.
- Set different background color and text color.
- Change the font color and increase the font size when mouse over it.
- Remove the underline from link.
- Change all the default behaviour of links.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.8 Horizontal Menu</title>
```

```
<style>
```

```
ul {
```

```
list-style: none;
```

```
padding: 0;
```

```
margin: 0;
```

```
display: flex;
```

```
}
```

```
li {
```

```
margin-right: 15px;
```

```
}
```

```
a {
```

```
text-decoration: none;
```

```
border: 2px solid #333;
```

```
padding: 10px;
```

```
    color: #333;

    background-color: #eee;

    font-size: 16px;
}

a:hover {

    background-color: #ccc;

    color: #fff;

    font-size: 18px;
}

a:active,
a:focus {

    outline: none;
}

</style>

</head>

<body>

<ul>

    <li><a href="option1.html">Option 1</a></li>

    <li><a href="option2.html">Option 2</a></li>

    <li><a href="option3.html">Option 3</a></li>

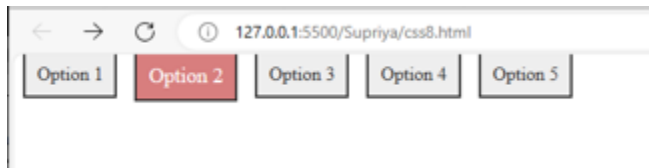
    <li><a href="option4.html">Option 4</a></li>

    <li><a href="option5.html">Option 5</a></li>

</ul>

</body>
```

</html>



**9. Develop a web page with a paragraph and add some contents before the paragraph with red color and yellow background using CSS.**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Q.9 Styled Paragraph with Contents</title>

<style>

body {

background-color: #fff8dc;

}

.highlight {

background-color: yellow;

color: red;

padding: 10px;

}

p {

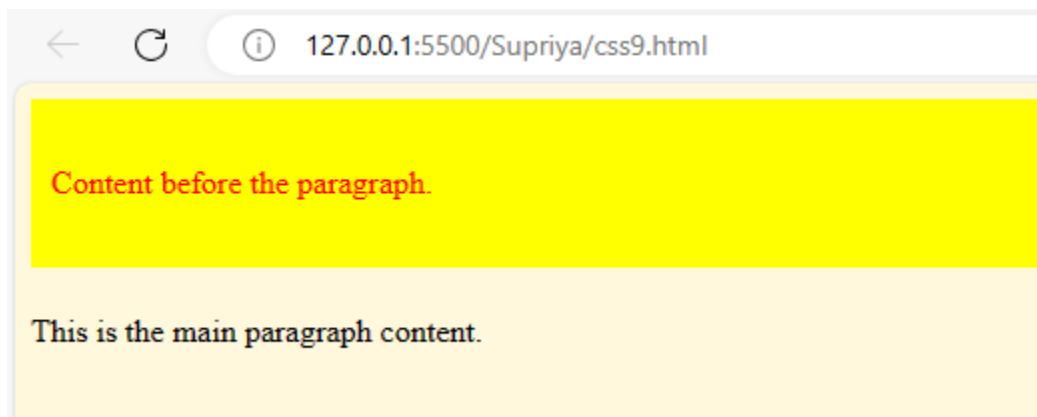
font-size: 16px;

line-height: 1.5;

```

    margin: 20px 0;
}
</style>
</head>
<body>
  <div class="highlight">
    <p>Content before the paragraph.</p>
  </div>
  <p>This is the main paragraph content.</p>
</body>
</html>

```



**10. Illustrate the concept of pseudo elements with example. (::after, ::first-letter, ::selection, ::first-line)**

```

<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Q.10 Pseudo Elements</title>

```



```
<style>

p::first-line {

    color: #3366cc;

    font-weight: bold;

}

p::first-letter {

    font-size: 24px;

    color: #cc3366;

    float: left;

    margin-right: 6px;

}

p::after {

    content: ' - Read more';

    color: #339966;

    font-style: italic;

}

::selection {

    background-color: #fff999;

    color: #333;

}

</style>

</head>

<body>
```

<p>

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus

ultricies efficitur velit, ut venenatis leo varius vel.

</p>

</body>

</html>



## 11. Design following list using html and CSS:

- **Mouse**
- **Keyboard**
- **Monitor**
- **Printer**
- **Touchpad**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

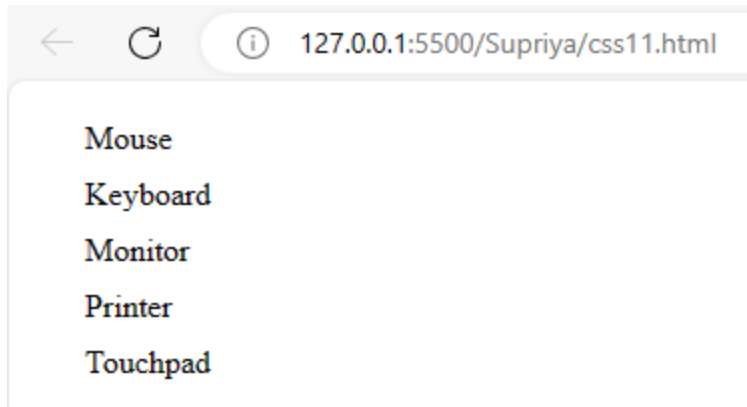
<title>Q.11 List Design</title>

<style>

ul {

list-style: none;

```
padding: 0;
margin: 20px 0;
}
li {
background: url('images/tick.png') no-repeat left center;
padding-left: 30px;
margin-bottom: 10px;
font-size: 16px;
background-size: 20px 20px;
}
</style>
</head>
<body>
<ul>
<li>Mouse</li>
<li>Keyboard</li>
<li>Monitor</li>
<li>Printer</li>
<li>Touchpad</li>
</ul>
</body>
</html>
```



## LAB 3(JavaScript and XML)

1. Illustrate with examples the concept of alert, confirm and popup boxes .

```
<!DOCTYPE html>

<html>

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Q1. Popup Box Examples</title>

</head>

<body>

<script>

    alert("This is an alert message!");

    var result = confirm("Do you want to proceed?");

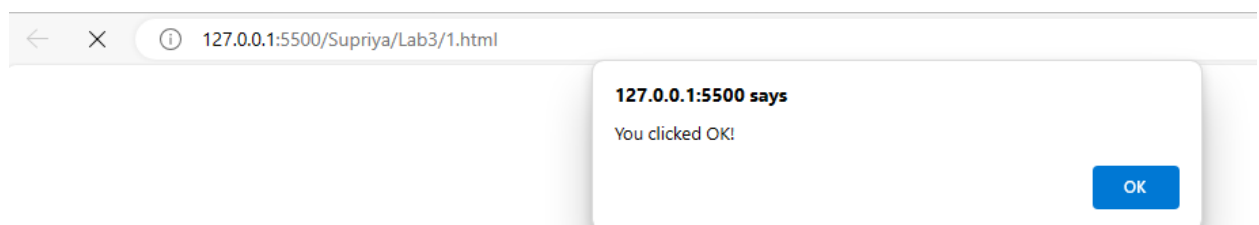
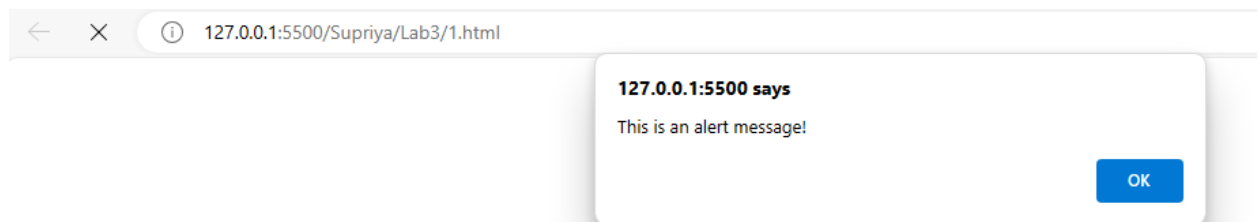
    if (result) {

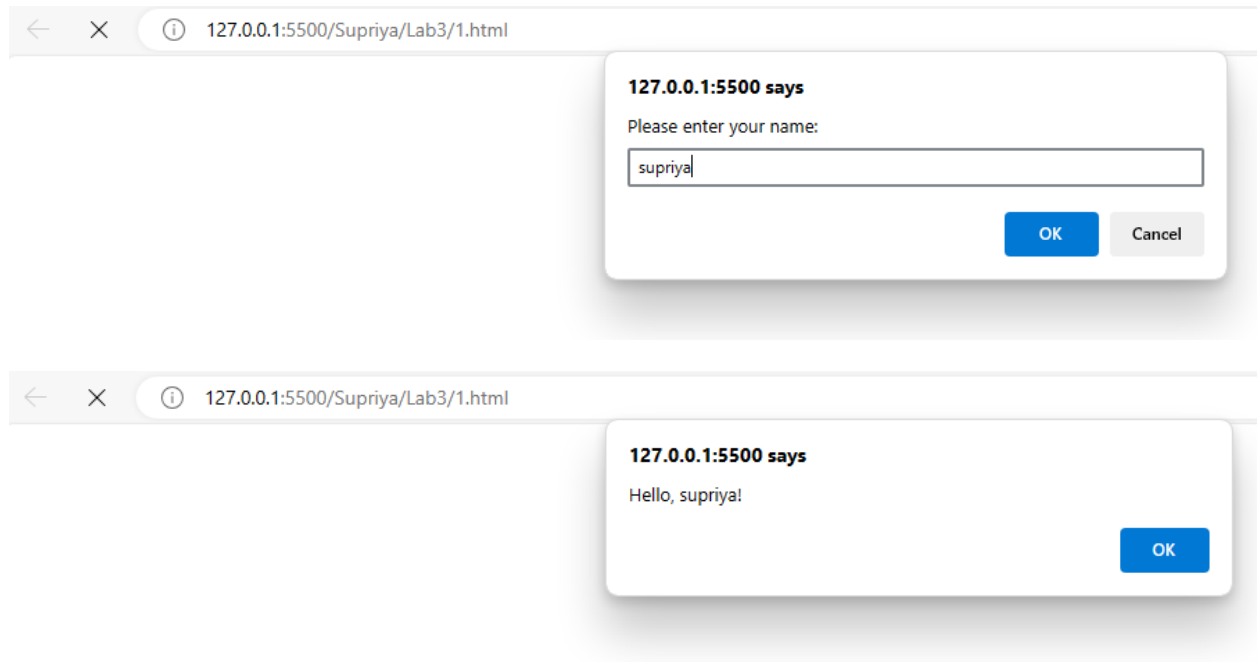
        alert("You clicked OK!");

    } else {

        alert("You clicked Cancel!");
```

```
}  
  
var userInput = prompt("Please enter your name:", "John Doe");  
  
if (userInput !== null) {  
    alert("Hello, " + userInput + "!");  
} else {  
    alert("You clicked Cancel or did not enter anything.");  
}  
  
</script>  
  
</body>  
  
</html>
```





## 2. WAP in javascript to demonstrate the objects, its properties and constructors with examples

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.2 Objects</title>
```

```
</head>
```

```
<body>
```

```
<script>
```

```
var person = {
```

```
  name: 'John Doe',
```

```
  age: 25,
```

```
        gender: 'Male',
    };

    function Car(make, model, year) {

        this.make = make;

        this.model = model;

        this.year = year;
    }

    console.log('Person Object: ');

    console.log('Name: ' + person.name);

    console.log('Age: ' + person.age);

    console.log('Gender' + person.gender);

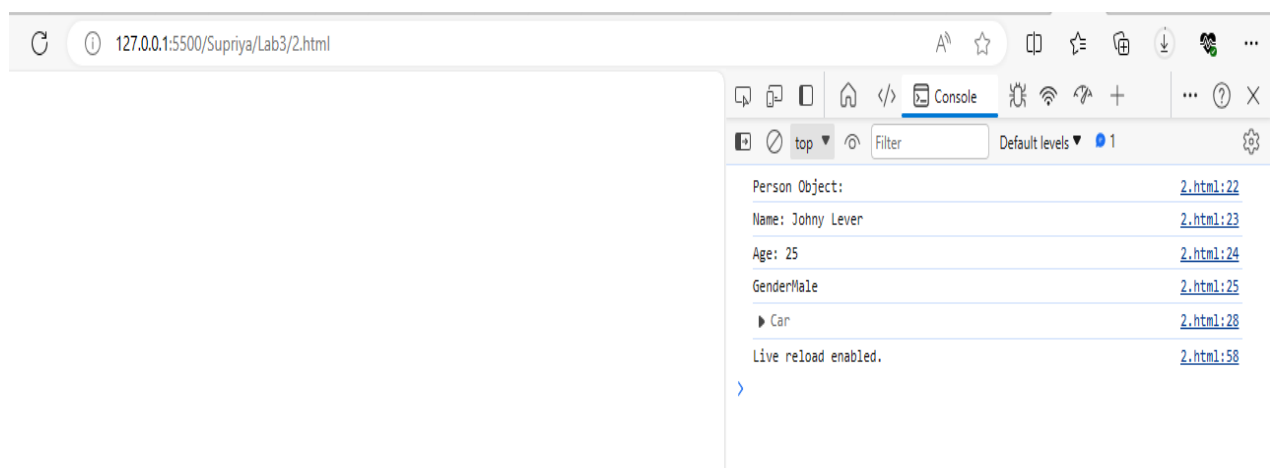

    var myCar = new Car('Toyota', 'Camry', 2022);

    console.log(myCar);

</script>

</body>

</html>
```



### 3.How array can be created in javascript? Create 2-D array and display the array in HTML table .

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.3 Array</title>

</head>

<body>

  <script>

    var twoDArray = [

      [1, 2, 3],

      [4, 5, 6],

      [7, 8, 9],

    ];

    document.write("<table border='1' cellspacing='0' cellpadding='5'>");

    for (var i = 0; i < twoDArray.length; i++) {

      document.write('<tr>');

      for (var j = 0; j < twoDArray[i].length; j++) {

        document.write('<td>' + twoDArray[i][j] + '</td>');

      }

      document.write('</tr>');

    }

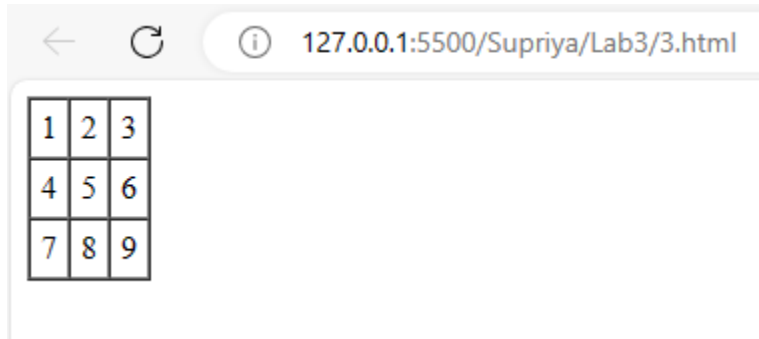
    document.write('</table>');
```



```
</script>

</body>

</html>
```



#### 4. Explain all the following built in objects with examples of each:

- **Array Methods**
- **Date Methods**
- **String Methods**
- **Math Methods**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.4 Builtin Objects</title>
```

```
</head>
```

```
<body>
```

```
<script>
```

```
var colors = ['red', 'green', 'blue'];
```

```
// Array methods
```

```
colors.push('yellow'); // Add element to the end
```

```

colors.pop(); // Remove element from the end

colors.unshift('orange'); // Add element to the beginning

colors.shift(); // Remove element from the beginning

document.write('<h1>Array Methods</h1>');

document.write('<p>colors = ' + colors + '</p>');

var currentDate = new Date();

document.write('<h1>Date Methods</h1>');

document.write('<p>currentDate = ' + currentDate + '</br>');

document.write('currentDate.getFullYear() = ' + currentDate.getFullYear() + '</br>');

document.write('currentDate.getMonth() = ' + currentDate.getMonth() + '</br>');

document.write('currentDate.getDate() = ' + currentDate.getDate() + '</p>');

var message = 'Hello, World!';

document.write('<h1>String Methods</h1>');

document.write('<p>message = ' + message + '</br>');

document.write('message.length = ' + message.length + '</br>');

document.write('message.toUpperCase() = ' + message.toUpperCase() + '</br>');

document.write('message.indexOf("World") = ' + message.indexOf('World') + '</p>');

document.write('<h1>Math Methods</h1>');

document.write('<p>Math.random() = ' + Math.random() + '</br>');

document.write('Math.round(4.7) = ' + Math.round(4.7) + '</br>');

document.write('Math.pow(2, 3) = ' + Math.pow(2, 3) + '</p>');

</script>

</body>

</html>

```

← ↻ ⓘ 127.0.0.1:5500/Supriya/Lab3/4.html

## Array Methods

```
colors = red,green,blue
```

## Date Methods

```
currentDate = Thu Jan 18 2024 11:22:16 GMT+0545 (Nepal Time)
currentDate.getFullYear() = 2024
currentDate.getMonth() = 0
currentDate.getDate() = 18
```

## String Methods

```
message = Hello, World!
message.length = 13
message.toUpperCase() = HELLO, WORLD!
message.indexOf("World") = 7
```

## Math Methods

```
Math.random() = 0.8530562213698689
Math.round(4.7) = 5
Math.pow(2, 3) = 8
```

**5. WAP that contains a text field for name, age, phone number, email, dropdown for colleges, radio for gender and a checkboxes for i accept all the terms. Perform the client side validations as:**

- **All fields are required**
- **Name must contains alphabets and white spaces and of length greater than 6 characters long**
- **Age must be integer and must be between and 50**
- **Phone number must be exactly 10 digits long and must start with 98 or 97**
- **Email must be valid**

<!DOCTYPE html>

<html lang="en">

```

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.5 Form Validation</title>

<style>

.error {

    color: red;

}

</style>

</head>

<body>

<h2>Form Validation</h2>

<form id="myForm" onsubmit="validateForm()">

    <label for="name">Name:</label>

    <input type="text" id="name" name="name" />

    <span id="nameError" class="error"></span><br />

    <label for="age">Age:</label>

    <input type="text" id="age" name="age" />

    <span id="ageError" class="error"></span><br />

    <label for="phone">Phone Number:</label>

    <input type="text" id="phone" name="phone" />

    <span id="phoneError" class="error"></span><br />

    <label for="email">Email:</label>

```

```

<input type="text" id="email" name="email" />

<span id="emailError" class="error"></span><br />

<label for="colleges">Colleges:</label>

<select id="colleges" name="colleges">

  <option value="" disabled selected>Select a college</option>

  <option value="college1">College 1</option>

  <option value="college2">College 2</option> </select><br />

<label>Gender:</label>

<input type="radio" id="male" name="gender" value="male" /> Male

<input type="radio" id="female" name="gender" value="female" /> Female

<input type="radio" id="other" name="gender" value="other" /> Other<br />

<span id="genderError" class="error"></span><br />

<label>

  <input type="checkbox" id="terms" name="terms" /> I accept all the terms

</label>

<span id="termsError" class="error"></span><br />

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

</form>

<script>

function validateForm() {

  var name = document.getElementById('name').value;

  var age = document.getElementById('age').value;

  var phone = document.getElementById('phone').value;

  var email = document.getElementById('email').value;

```

```

var colleges = document.getElementById('colleges').value;

var gender = document.querySelector('input[name="gender"]:checked');

var terms = document.getElementById('terms').checked;

if (name.length < 7 || !/^[a-zA-Z\s]+$/.test(name)) {

    document.getElementById('nameError').innerHTML =

        alert( 'Name must be at least 7 characters long and contain only alphabets and spaces.' );

    return false;

}

if (!/^d+$/.test(age) || age < 18 || age > 50) {

    document.getElementById('ageError').innerHTML =

        'Age must be an integer between 18 and 50.';

    return false;

}

if (!/^[9][78]d{8}$/.test(phone)) {

    document.getElementById('phoneError').innerHTML =

        'Phone number must be exactly 10 digits long and start with 98 or 97.';

    return false;

}

if (!/^\S+@\S+\.\S+$/.test(email)) {

    document.getElementById('emailError').innerHTML =

        'Invalid email address.';

    return false;

}

if (colleges === "") {

```

```

        alert('Please select a college.');
```

```

        return false;
    }

    if (!gender) {

        document.getElementById('genderError').innerHTML =

            'Please select a gender.';

        return false;
    }

    if (!terms) {

        document.getElementById('termsError').innerHTML =

            'Please accept the terms.';

        return false;
    }

    alert('Form submitted successfully!');

    return true;
}

</script>

</body>

</html>

```

## Form Validation

Name:

Age:

Phone Number:

Email:

Colleges:

Gender: ☐ Male ☒ Female ☐ Other

☐ I accept all the terms

### 127.0.0.1:5500 says

Name must be at least 7 characters long and contain only alphabets and spaces.

OK

← ↻ ⓘ 127.0.0.1:5500/Supriya/Lab3/5.html?name=Supriya+Gupta&age=0.5&phone=9708345431&email=gsupriya073%40gma

## Form Validation

Name:

Age:

Phone Number:

Email:

Colleges:

Gender: ☐ Male ☐ Female ☐ Other

☐ I accept all the terms

**127.0.0.1:5500 says**

Age must be an integer between 18 and 50.

← ↻ ⓘ 127.0.0.1:5500/Supriya/Lab3/5.html

## Form Validation

Name:

Age:

Phone Number:

Email:

Colleges:

Gender: ☐ Male ☒ Female ☐ Other

☐ I accept all the terms

**127.0.0.1:5500 says**

Phone number must be exactly 10 digits long and start with 98 or 97.

← ↻ ⓘ 127.0.0.1:5500/Supriya/Lab3/5.html?name=Supriya+Gupta&age=21&phone=97083454&email=gsupriya073%40gmail.con

## Form Validation

Name:

Age:

Phone Number:

Email:

Colleges:

Gender: ☐ Male ☒ Female ☐ Other

☒ I accept all the terms

**127.0.0.1:5500 says**

Form submitted successfully!

## 6.How events are handled in Javascript? Illustrate with examples •

<!DOCTYPE html>

<html>

<head>



```

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.6 Event Handling Example</title>

</head>

<body>

  <button id="myButton">Click me!</button>

  <script>

    var button = document.getElementById('myButton');

    function buttonClickHandler() {

      alert('Button clicked!');

    }

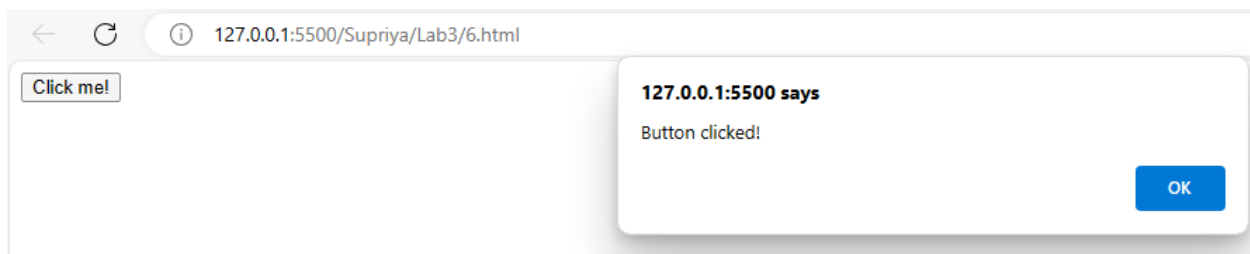
    button.addEventListener('click', buttonClickHandler);

  </script>

</body>

</html>

```



## 7. WAP to show the concept of Try/Catch .

```

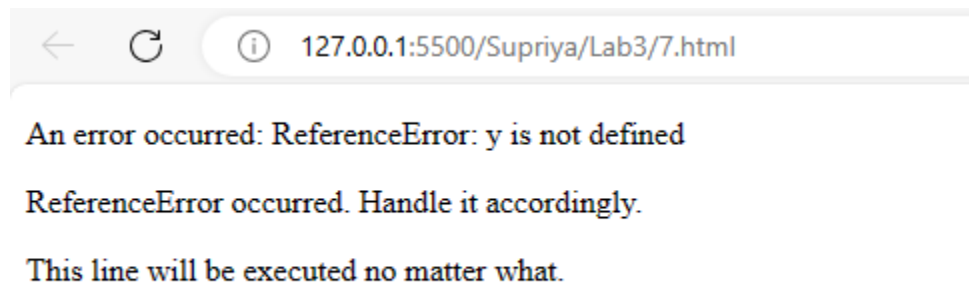
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Q.7 Try/Catch Example</title>
  </head>
  <body>
    <script>
      try {
        var x = y + 5;
        document.write('<p>x=' + x + 'y=' + y + '</p>');
      }
    </script>
  </body>
</html>

```

```

    document.write('<p>This line will not be executed due to the error.</p>');
  } catch (error) {
    document.write('<p>An error occurred: ' + error + '</p>');
    if (error instanceof ReferenceError) {
      document.write('<p>ReferenceError occurred. Handle it accordingly.</p>');
    }
  } finally {
    document.write('This line will be executed no matter what.</p>');
  }
</script>
</body>
</html>

```



**8. Write jQuery to show the concept of on click, on mouse out, onkeyup, on form submit events .**

```

<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Q.8 jQuery Event Handling</title>

  <!-- Include jQuery -->

  <script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>

</head>

<body>

```

```

<button id="myButton">Click me!</button>

<p id="myParagraph">Mouse over me!</p>

<input type="text" id="myInput" placeholder="Type something" />

<form id="myForm">

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

</form>



<script>

    // On Click Event

    $('#myButton').on('click', function () {

        alert('Button clicked!');

    });

    // On Mouse out Event

    $('#myParagraph').on('mouseout', function () {

        $(this).css('background-color', 'red');

    });

    // On Key Up Event

    $('#myInput').on('keyup', function () {

        var inputValue = $(this).val();

```

```

    alert('Input value:', inputValue);

});

// On Form Submit Event

$('#myForm').on('submit', function (event) {

    event.preventDefault();

    alert('Form submitted!');

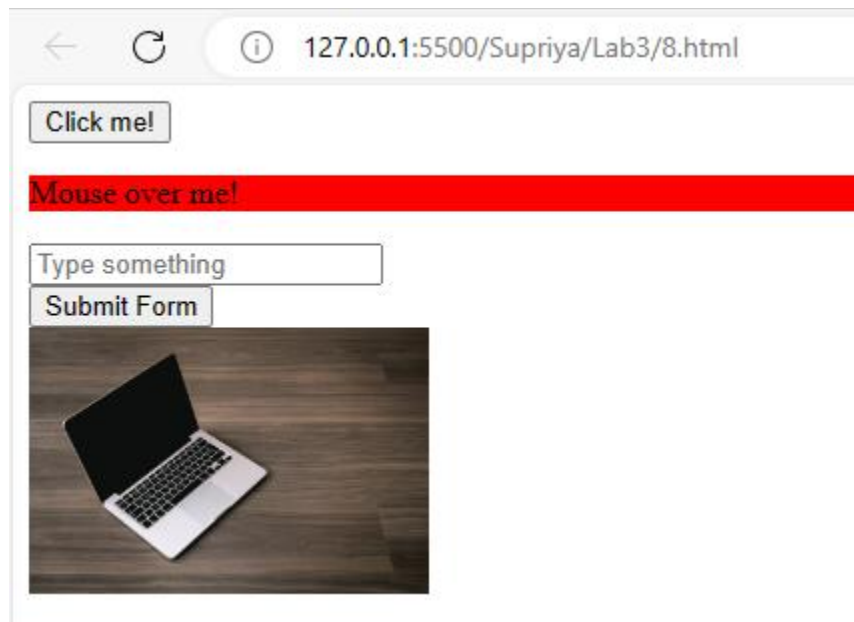
});

</script>

</body>

</html>

```



**9. Illustrate how jQuery effects(hide/show, fade, stop can be done in any image) .**

```

<!DOCTYPE html>

<html>

<head>

```

```

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.9 jQuery Effects</title>

<!-- Include jQuery -->

<script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>

<style>

    #myImage {

        width: 200px;

        height: 200px;

        border: 1px solid #ccc;

        margin-bottom: 10px;

    }

</style>

</head>

<body>

    <button id="showHideButton">Toggle Image</button>

    <button id="fadeInOutButton">Fade In/Out</button>

    <button id="stopButton">Stop Animation</button>

```

```
<script>

// Show/Hide Effect

$('#showHideButton').on('click', function () {

    $('#myImage').toggle('slow');

});

// Fade In/Out Effect

$('#fadeInOutButton').on('click', function () {

    $('#myImage').fadeToggle('slow');

});

// Stop Animation

$('#stopButton').on('click', function () {

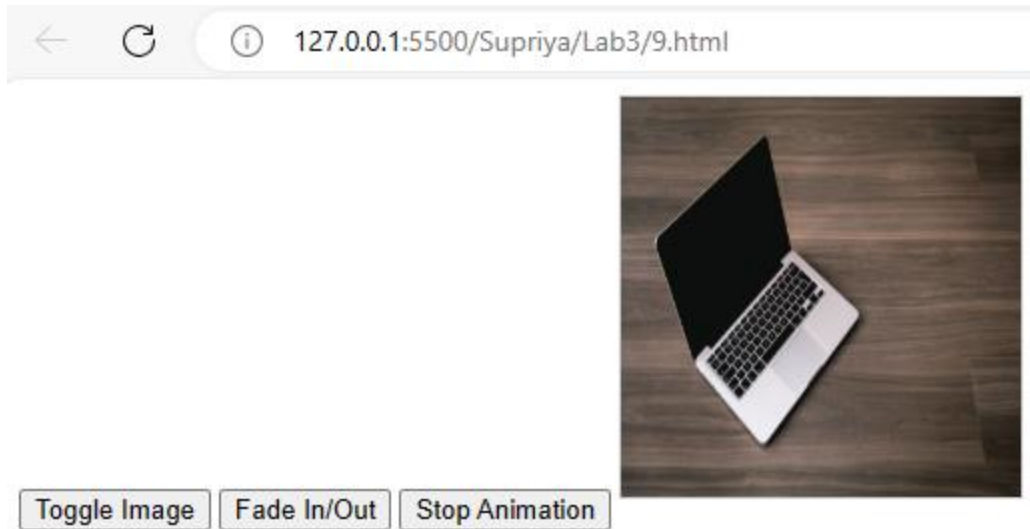
    $('#myImage').stop();

});

</script>

</body>

</html>
```



## 10.How animation is done using jQuery? Illustrate with exmample .

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Q.10 jQuery Animation Example</title>
```

```
<script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>
```

```
<style>
```

```
#animatedBox {
```

```
width: 100px;
```

```

    height: 100px;

    background-color: blue;

    position: relative;

}

</style>

</head>

<body>

    <button id="animateButton">Animate Box</button>

    <div id="animatedBox"></div>

    <script>

        $(document).ready(function () {

            // Animate Box when the button is clicked

            $('#animateButton').on('click', function () {

                // Use the animate function to change CSS properties over time

                $('#animatedBox').animate(

                    {

                        left: '+=150', // Move 150 pixels to the right

                        opacity: 0.5, // Change opacity to 0.5

                        width: '+=50', // Increase width by 50 pixels

                        height: '+=50', // Increase height by 50 pixels

                    },

                    1000,

                    function () {

```



```

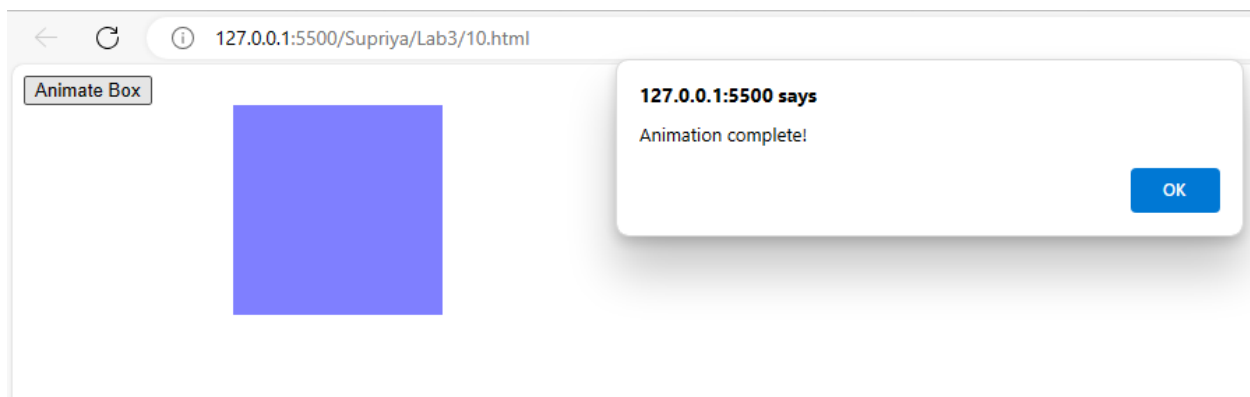
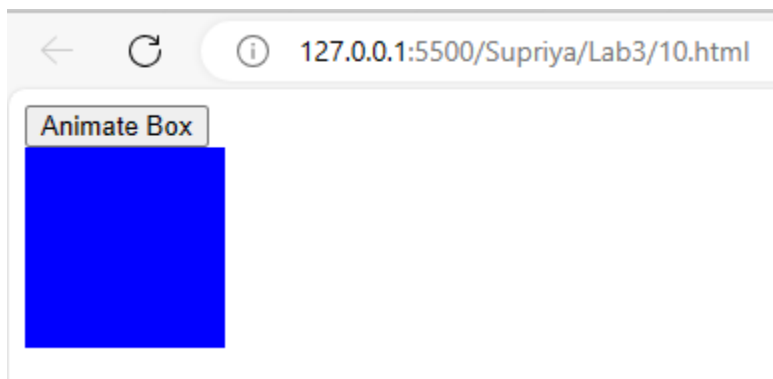
        alert('Animation complete!');
    }

);

});

});
</script>
</body>
</html>

```



## 11. How json file is created? How can we parse the JSON file using JavaScript?

```
<!DOCTYPE html>
```

```
<html>
```

```

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Q.11 Parse JSON with JavaScript</title>

</head>

<body>

<script>

  var jsonString = '{ "name": "Suyash Shrestha", "age": 21, "city": "KTM", "skills": ["JavaScript",
"HTML", "CSS"] }';

  var parsedData = JSON.parse(jsonString);

  document.write("<p>Name: " + parsedData.name + "</br>");

  document.write("Age: " + parsedData.age + "</br>");

  document.write("City: " + parsedData.city + "</br>");

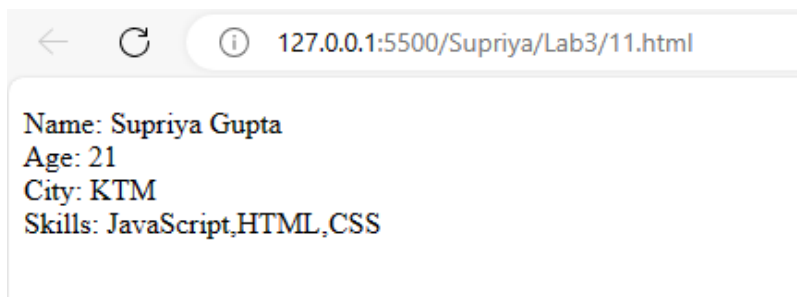
  document.write("Skills: " + parsedData.skills + "</p>");

</script>

</body>

</html>

```



**12. How AJAX is used to get the data from the server to the client side? Illustrate with example .**

```

<!DOCTYPE html>

<html>

```

```

<head>

<meta charset="UTF-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Q.12 AJAX Example</title>

</head>

<body>

<button id="getDataButton">Get Data</button>

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

<script>

document

.getElementById('getDataButton')

.addEventListener('click', function () {

    // Create a new XMLHttpRequest object

    var xhr = new XMLHttpRequest();

    // Configure it to make a GET request to the specified URL

    xhr.open('GET', 'https://jsonplaceholder.typicode.com/todos/1', true);

    // Set up a callback function to handle the response

    xhr.onreadystatechange = function () {

        if (xhr.readyState == 4 && xhr.status == 200) {

            // Parse the JSON response

            var responseData = JSON.parse(xhr.responseText);

            // Update the content on the client side

            document.getElementById('result').innerHTML = `

```

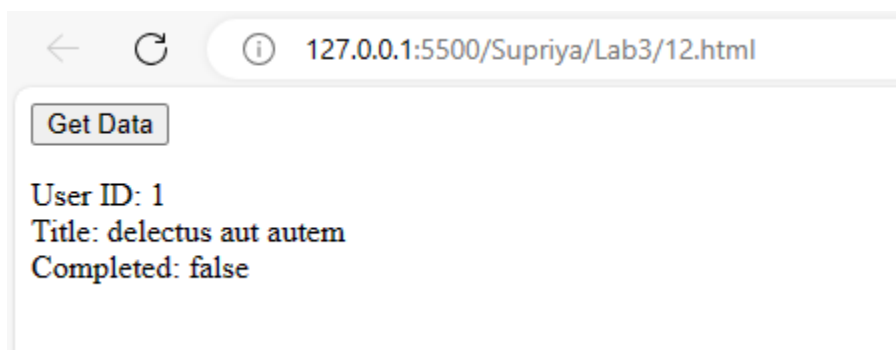
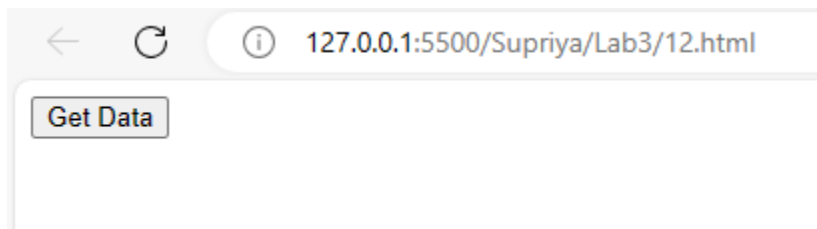
```

        <p>User ID: ${responseData.userId}<br/>
        Title: ${responseData.title}<br/>
        Completed: ${responseData.completed}</p>
    `;
    }
    };

    // Send the request
    xhr.send();

});
</script>
</body>
</html>

```



### 13. Create a simple XML element .

```

<?xml version="1.0" encoding="UTF-8"?>

<book>

```

```
<title>Introduction to XML</title>
```

```
<author>John Doe</author>
```

```
<publicationYear>2022</publicationYear>
```

```
</book>
```

<!-- The root element is <book>.

It contains child elements <title>, <author>, and <publicationYear>.

Each child element has text content providing information about the book.

This is a basic structure, and XML can be used to represent more complex data with nested elements and attributes. Remember that XML documents start with a declaration (<?xml version="1.0" encoding="UTF-8"?>). The declaration specifies the XML version and the character encoding used in the document.

-->



#### 14. Create an XML document that conforms to the following DTD.

```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT Report (Students, Classes, Courses)>
<!ELEMENT Students (Student*)>
<!ELEMENT Classes (Class*)>
<!ELEMENT Courses (Course*)>
```

```

<!ELEMENT Student (Name, Status, CrsTaken*)>
<!ELEMENT Name (First, Last)>
<!ELEMENT First (#PCDATA)>
<!ELEMENT Last (#PCDATA)>
<!ELEMENT Status (#PCDATA)>
<!ELEMENT CrsTaken (#PCDATA)>
<!ELEMENT Class (Semester, ClassRoster)>
<!ELEMENT Semester (#PCDATA)>
<!ELEMENT ClassRoster (#PCDATA)>
<!ELEMENT Course (#PCDATA)>
<!ATTLIST Student StudId ID #REQUIRED>
<!ATTLIST Course CrsCode ID #REQUIRED>
<!ATTLIST CrsTaken CrsCode IDREF #REQUIRED>
<!ATTLIST ClassRoster Members IDREFS #REQUIRED>

```

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<!DOCTYPE Report SYSTEM "report.dtd">
```

```
<Report>
```

```
<Students>
```

```
<Student StudId="s1">
```

```
<Name>
```

```
<First>Supriya</First>
```

```
<Last>Gupta</Last>
```

```
</Name>
```

```
<Status>Enrolled</Status>
```

```
<CrsTaken CrsCode="c1"/>
```

```
<CrsTaken CrsCode="c2"/>
```

```
</Student>
```

```
<Student StudId="s2">
```

```
<Name>
```

```
<First>Jane</First>
```

```
<Last>Smith</Last>
```

```

    </Name>

    <Status>Graduated</Status>

    <CrsTaken CrsCode="c1"/>

  </Student>

</Students>

<Classes>

  <Class>

    <Semester>Fall 2022</Semester>

    <ClassRoster Members="s1 s2"/>

  </Class>

</Classes>

<Courses>

  <Course CrsCode="c1">Computer Science</Course>

  <Course CrsCode="c2">Mathematics</Course>

</Courses>

</Report>

```

<!-- The XML document references the DTD using the <!DOCTYPE ...> declaration.

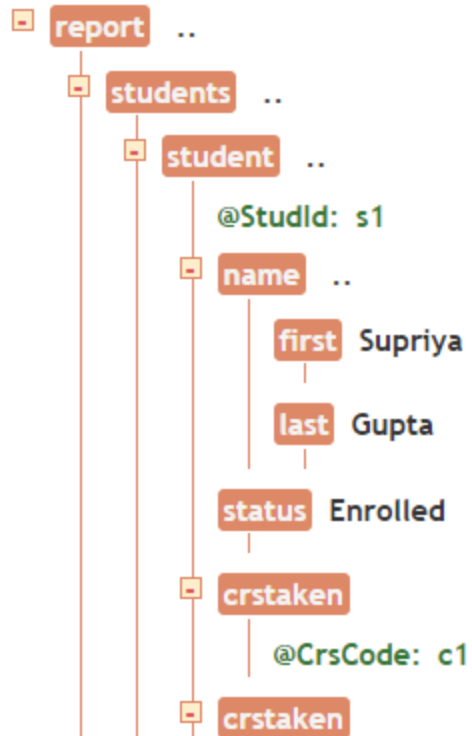
The structure of the XML document follows the specified DTD elements and attributes.

The StudId attribute for the <Student> element, CrsCode attribute for the <Course> element, and CrsCode attribute for the <CrsTaken> element are defined as IDs or IDREFs in the DTD.

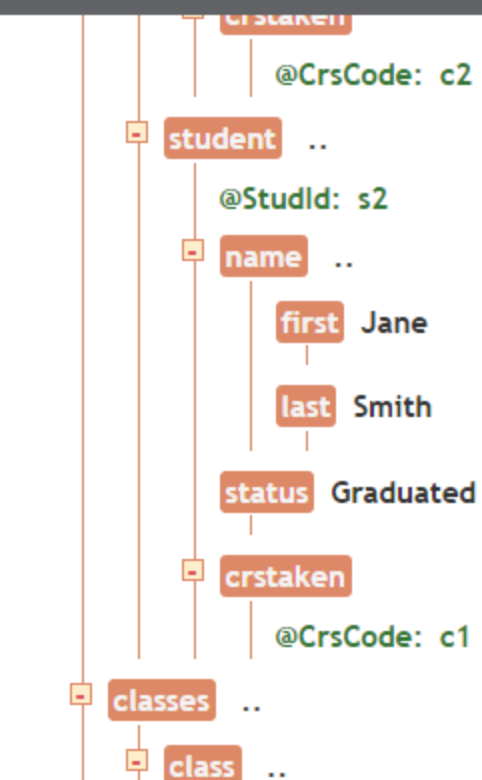
The Members attribute for the <ClassRoster> element is defined as IDREFS in the DTD.

This is a simple example, and in a real-world scenario, the XML document may contain more data and follow a more complex structure based on the specific requirements. -->

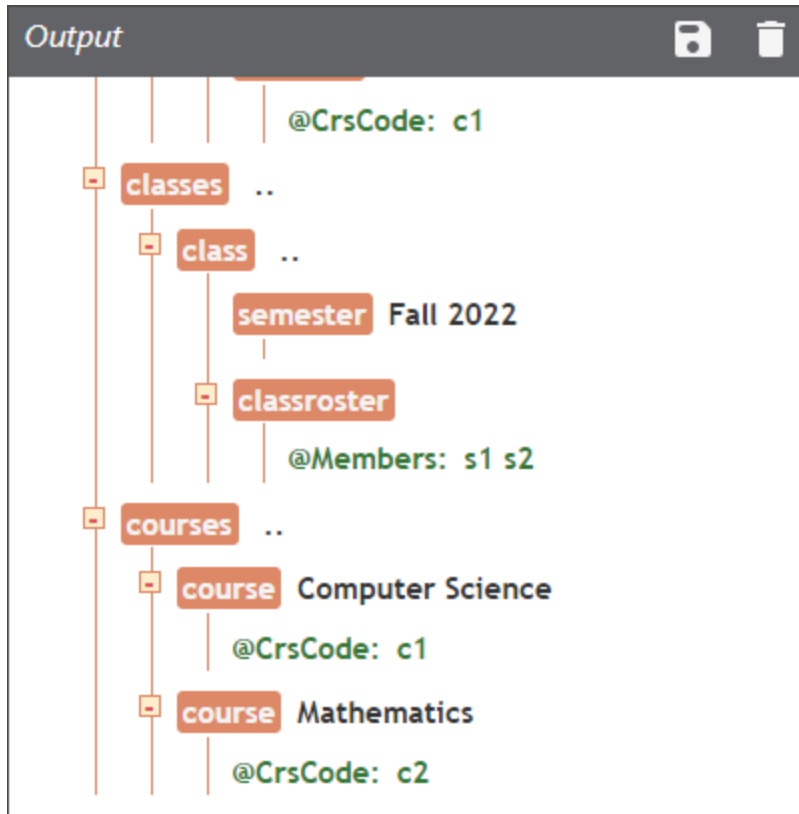
Output



Output







## 15. Create a XML document with simple and complex type .

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<library xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="library.xsd">
```

```
<!-- Simple Type Example -->
```

```
<book>
```

```
<title>Introduction to XML</title>
```

```
<author>John Doe</author>
```

```
<publicationYear>2022</publicationYear>
```

```
<price>29.99</price>
```

```
</book>
```

```
<!-- Complex Type Example -->
```

```

<bookstore>

  <book>

    <title>Web Development Basics</title>

    <author>Jane Smith</author>

    <publicationYear>2021</publicationYear>

    <details>

      <genre>Programming</genre>

      <pages>300</pages>

    </details>

  </book>

</bookstore>

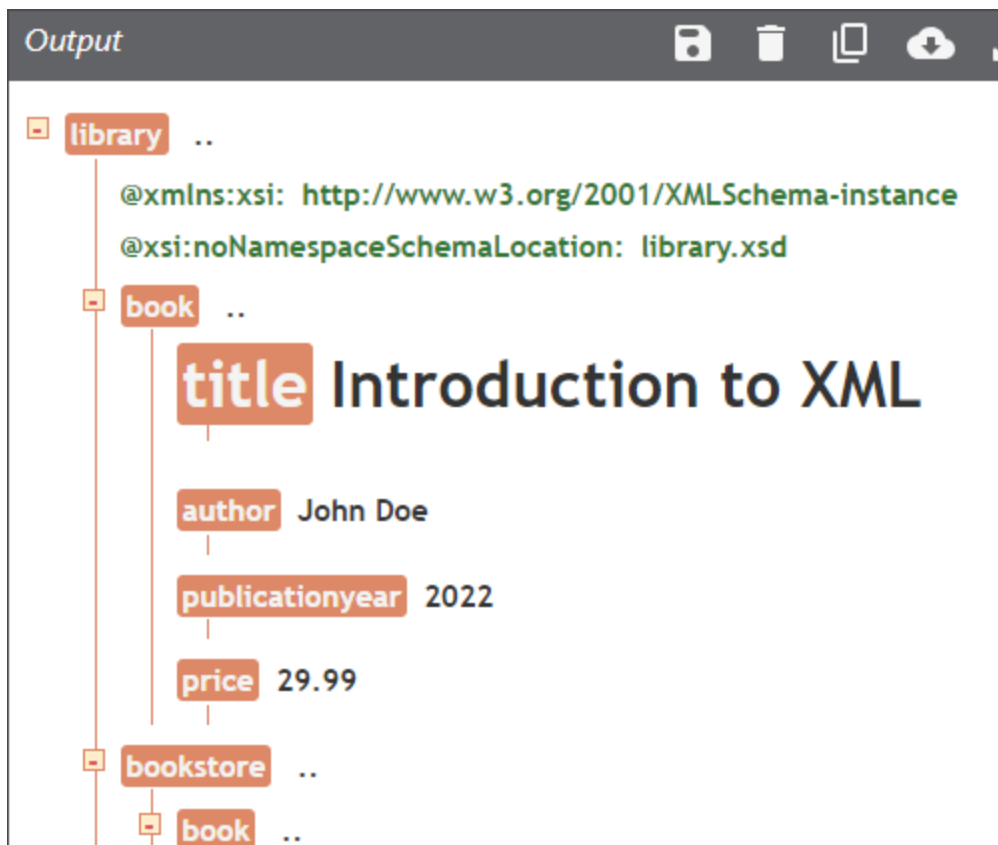
</library>

```

<!--

- The <price> element is defined as a simple type with the type xs:decimal.
- The <details> element is defined as a complex type with a sequence of child elements (<genre> and <pages>).
- The root element <library> allows a choice between <book> and <bookstore>.
- The <book> element is defined as a complex type with a choice of child elements including the simple type <price> and the complex type <details>.
- The <bookstore> element is defined as a complex type allowing a collection of <book> elements.

-->



## 16. How XSLT is used to transform the XML document? Illustrate with example .

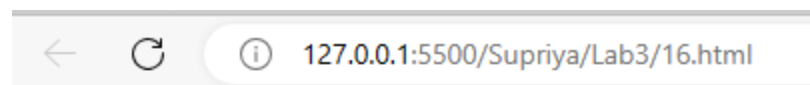
lab.xml

```
<?xml version="1.0" encoding="UTF-8"?> <library> <book> <title>Six of Crows</title>
<author>Holly</author> </book> <book> <title>The Song of Achilles</title>
<author>Idk</author> </book> </library>
```

```
lab.html <html> <head> <title>Qn.16</title> </head> <body> <h1>List</h1> <ul> <li>
<strong>Title:</strong> Six if Crows<br /> <strong>Author:</strong> Holly </li> <li>
<strong>Title:</strong> The song of Achilles<br /> <strong>Author:</strong> Idk </li>
</ul> </body></html>
```

transform.xslt

```
<?xml version="1.0" encoding="UTF-8"?> <xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"> <xsl:template match="/"> <html>
<head> <title>List</title> </head> <body> <h1>List</h1> <ul> <xsl:apply-templates
select="library/book"/> </ul> </body> </html> </xsl:template> <xsl:template
match="book"> <li> <strong>Title:</strong> <xsl:value-of select="title"/> <br/>
<strong>Author:</strong> <xsl:value-of select="author"/> </li>
</xsl:template> </xsl:stylesheet>
```



Kabir

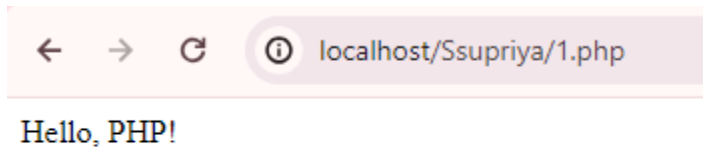
## List

- **Title:** way of living  
**Author:** Rampal ji maharaj
- **Title:** Gyan ganga  
**Author:** Kabir

# LAB 4(PHP)

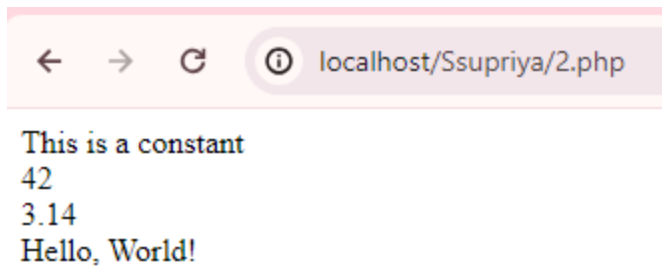
1. Write a simple PHP script that prints "Hello, PHP!" to the browser .

```
<?php  
  
echo "Hello, PHP!";  
  
?>
```



2. Declare variables of different data types (integer, float, string) and demonstrate the usage of constants in PHP .

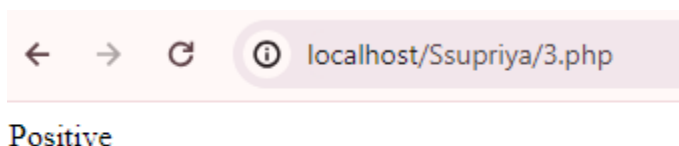
```
<?php  
  
$integerVar = 42;  
  
$floatVar = 3.14;  
  
$stringVar = "Hello, World!";  
  
define("MY_CONSTANT", "This is a constant");  
  
echo MY_CONSTANT . "<br>";  
  
echo $integerVar . "<br>";  
  
echo $floatVar . "<br>";  
  
echo $stringVar;  
  
?>
```



```
← → ↻ ⓘ localhost/Ssupriya/2.php  
This is a constant  
42  
3.14  
Hello, World!
```

**3. Create a PHP program that uses if-else statements to check if a number is positive, negative, or zero. Utilize different operators for comparison .**

```
<?php  
  
$number = 7;  
  
if ($number > 0) {  
    echo "Positive";  
} elseif ($number < 0) {  
    echo "Negative";  
} else {  
    echo "Zero";  
}  
  
?>
```



```
← → ↻ ⓘ localhost/Ssupriya/3.php  
Positive
```

**4. Develop a function that calculates the average of an array of numbers. Test the function with various arrays •**

```
<?php  
  
function calculateAverage($numbers)
```

```

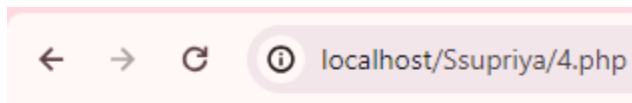
{
    return array_sum($numbers) / count($numbers);
}

$testArray = [5, 10, 15];

echo calculateAverage($testArray);

?>

```



10

**5. Define a PHP class representing a "Book" with properties like title and author. Create objects of this class and display their attributes.**

```

<?php

class Book

{

    public $title;

    public $author;

}

$book1 = new Book();

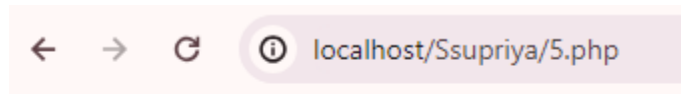
$book1->title = "The Great Gatsby";

$book1->author = "F. Scott Fitzgerald";

echo $book1->title . " by " . $book1->author;

?>

```



The Great Gatsby by F. Scott Fitzgerald

**6. Design a simple HTML form with input fields. Create a PHP script that retrieves and displays the form data when submitted.** • [Code](#)

```
<html>

<head>

    <title>Q.6 Form retrieval</title>

</head>

<body>

    <form method="post" action="#">

        <input type="text" name="username" placeholder="Username">

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

    </form>

</body>

</html>

<?php

if ($_SERVER["REQUEST_METHOD"] == "POST") {

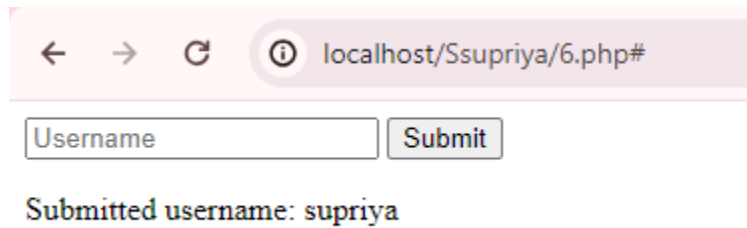
    $username = $_POST["username"];

    echo "Submitted username: $username";

}
```



?>



← → ↻ ⓘ localhost/Ssupriya/6.php#

Username Submit

Submitted username: supriya

**7.Enhance the previous form with PHP validation. Ensure that required fields are filled, and validate email addresses and make sure the phone number starts with 98 or 97 using regex .**

```
<?php

if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $username = $_POST["username"];

    $email = $_POST["email"];

    $phone = $_POST["phone"];

    if (empty($username) || empty($email) || empty($phone)) {

        echo "All fields are required.";

    } elseif (!filter_var($email, FILTER_VALIDATE_EMAIL)) {

        echo "Invalid email address.";

    } elseif (!preg_match("/^(98|97)/", $phone)) {

        echo "Phone number must start with 98 or 97.";

    } else {

        echo "Form data validated successfully!";

    }

}
```

```

    }
}
?>

<html>

<head>

    <title>Q.7 Form validation</title>

</head>

<body>

    <form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]); ?>">

        <input type="text" name="username" placeholder="Username">

        <input type="text" name="email" placeholder="Email">

        <input type="text" name="phone" placeholder="Phone">

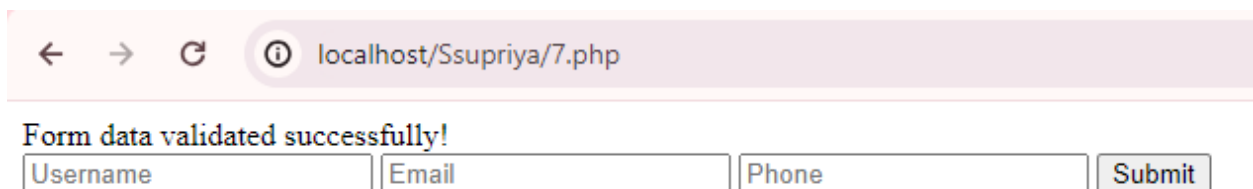
        <input type="submit" value="Submit">

    </form>

</body>

</html>

```



The screenshot shows a web browser window with the address bar displaying 'localhost/Ssupriya/7.php'. Below the address bar, a message reads 'Form data validated successfully!'. Underneath this message, there are four input fields: 'Username', 'Email', 'Phone', and a 'Submit' button.

**8. Implement PHP code that responds to a button click event on a form. Display a message when the button is clicked • [Code](#)**

```
<html>

<head>

    <title>Q.8 Button click</title>

</head>

<form method="post">

    <input type="submit" name="submitBtn" value="Click me">

</form>

</html>

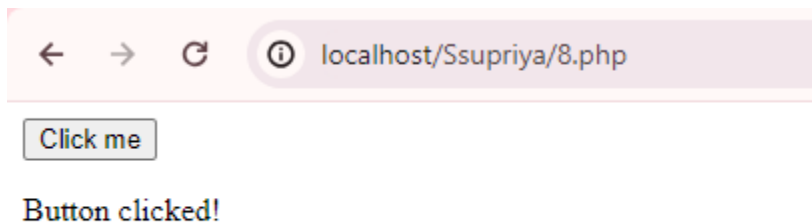

<?php

if (isset($_POST["submitBtn"])) {

    echo "Button clicked!";

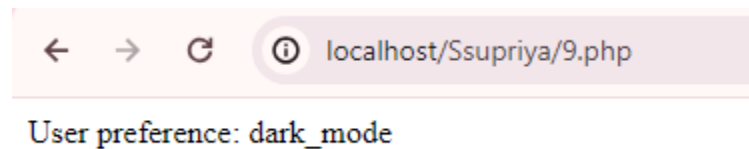
}

?>
```



**9. Create a PHP script that sets a cookie with user preferences. Retrieve and display this information on subsequent visits •**

```
<?php  
  
setcookie("user_pref", "dark_mode", time() + 3600, "/");  
  
if (isset($_COOKIE["user_pref"])) {  
    echo "User preference: " . $_COOKIE["user_pref"];  
}  
  
?>
```



**10. Build a form with various elements (textboxes, checkboxes, radio buttons). Use PHP to access and display the selected values .**

```
<!DOCTYPE html>  
  
<html>  
  
<head>  
    <title>PHP Form</title>  
</head>  
  
<body>  
    <h2>PHP Form Example</h2>  
  
    <?php  
  
    // Check if form is submitted  
  
    if ($_SERVER["REQUEST_METHOD"] == "POST") {  
  
        // Retrieve and display the values
```

```

$name = $_POST["name"];

$email = $_POST["email"];

$gender = $_POST["gender"];

$interests = isset($_POST["interests"]) ? $_POST["interests"] : [];

echo "<h3>Form Submission Results</h3>";

echo "Name: $name<br/>";

echo "Email: $email<br/>";

echo "Gender: $gender<br/>";

if (!empty($interests)) {

    echo "Interests: " . implode(", ", $interests) . "<br/>";

} else {

    echo "No interests selected.<br/>";

}

}

?>

<form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">

    <label for="name">Name:</label>

    <input type="text" name="name" id="name" required>

    <br>

    <label for="email">Email:</label>

    <input type="email" name="email" id="email" required>

    <br>

    <label>Gender:</label>

```

```
<input type="radio" name="gender" value="male" id="male">
<label for="male">Male</label>

<input type="radio" name="gender" value="female" id="female">
<label for="female">Female</label>

<br>

<label>Interests:</label>

<input type="checkbox" name="interests[]" value="programming" id="programming">
<label for="programming">Programming</label>

<input type="checkbox" name="interests[]" value="reading" id="reading">
<label for="reading">Reading</label>

<input type="checkbox" name="interests[]" value="traveling" id="traveling">
<label for="traveling">Traveling</label>

<br>

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

</form>

</body>

</html>
```

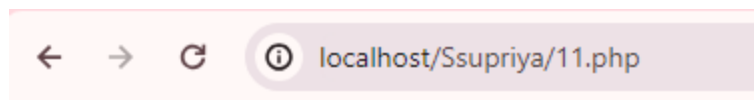
## PHP Form Example

### Form Submission Results

Name: supriya  
Email: gsupriya073@gmail.com  
Gender: female  
Interests: traveling  
Name:   
Email:   
Gender: ☐ Male ☐ Female  
Interests: ☐ Programming ☐ Reading ☐ Traveling

### 11. Develop a PHP script that reads content from a text file, modifies it, and then writes the updated content back to the file

```
<?php  
  
$filename = "example.txt";  
  
// Read content from file  
  
$content = file_get_contents($filename);  
  
// Modify content  
  
$newContent = str_replace("old_text", "new_text", $content);  
  
// Write updated content back to file  
  
file_put_contents($filename, $newContent);  
  
echo "File updated successfully";  
  
?>
```



File updated successfully