

S.N.D	Observation	Marks	Signature
1.	Personal webPage 25/8/24		
2.	clickable image link 25/8/24		
3.	Navigation Bar . 26/8/24		
4.	Student grades 26/8/24		
5.	Product information table 27/8/24		
6.	Employee list 27/8/24		
7.	Navigation 28/8/24		
8.	Document with folder 28/8/24		
9.	three column layout 29/8/24		
10.	my resume 29/8/24		
11.	Promotion Button 30/8/24		
12.	welcome to website . 30/8/24		

## IP - Internet Programs

Q) Scenario :-

You are tasked with creating a simple Personal Webpage that includes your name, a brief bio, and a link to your favorite website.

Question :- How would you structure this HTML Page? Include elements for a heading, a paragraph for the bio, and a hyperlink to your favorite website.

Code :-

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>my Personal webPage</title>
</head>
<body>
  <h1>your Name</h1>
  <p>This is a brief bio about yourself. You can include information like your hobbies, interests, or professional background.</p>
  <a href="https://www.yourfavoritesite.com" target="_blank">visit my favourite website!</a>
</body>
</html>
```

## Q) Scenario 2:-

Image as a clickable Link.

How would you code this in HTML? Describe the tags and attributes you would use.

```
<!DOCTYPE html>
<html lang = "en">
<head>
<meta charset = "UTF-8">
<title> Image Link Example </title>
</head>
<body>
<a href = "https://www.anotherwebsite.com" target =
"-blank">
<img src = "image.jpg" alt = "clickable Image">
</a>
</body>
</html>
```

## 3) Scenario 3:-

How would you structure this using an ~~unordered~~ list in HTML?

### Q. HTML Tables

Navigation Bar using ~~unordered List~~

```
<!DOCTYPE html>
<html lang = "en">
<head>
<meta charset = "UTF-8">
<title> Navigation Bar Example </title>
</head>
<body>
<ul>
```

```
<a href="home.html">Home</a><br>
<a href="about.html">About</a><br>
<a href="contact.html">Contact</a>
```

```
</ul>
```

```
</body>
```

```
</html>
```

#### 4) Scenario 4:-

You are designing a webpage that displays student grades in a tabular format. Each row should represent a student, with columns for the student's ID, name, and grade. The first row should be a header row.

Table for student Grades.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Student Grades</title>
</head>
<body>
    <table border="1">
        <thead>
            <tr>
                <th>Student ID</th>
                <th>Name</th>
                <th>Grade</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>001</td>
                <td>John Doe</td>
                <td>A</td>
            </tr>
            <tr>
                <td>002</td>
                <td>Jane Smith</td>
                <td>B+</td>
            </tr>
        </tbody>
    </table>
</body>
```

```
<td>002</td>
<td>Jane Smith</td>
<td>B</td>
</tr>
</table>
</body>
</html>
```

### 5) Scenario 6:

- Table with Merged cells using colspan.
- How would you use the colspan attribute to achieve this layout in HTML?

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Product Information </title>
</head>
<body>
    <table border="1">
        <tr>
            <th colspan="2">Product Name </th>
            <th>Price </th>
            <th>Quantity </th>
        <tr>
            <td colspan="2">Product 1</td>
            <td>$10</td>
            <td>50</td>
        <tr>
    </table>
</body>
</html>
```

## 6) Scenario 6:-

Table with Rowspan for Department and Employees.

You are required to create a table that lists Employees by department. The department name should span across multiple rows, with employee names listed in the rows beneath each department name.

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
  <title>Employee List</title>
```

```
</head>
```

```
<body>
```

```
  <table border="1">
```

```
    <tr>
```

```
      <th>Department</th>
```

```
      <th>Employee Name</th>
```

```
    </tr>
```

```
    <tr>
```

```
      <td rowspan="2">Sales</td>
```

```
      <td>John Doe</td>
```

```
    </tr>
```

```
    <tr>
```

```
      <td>Jane Smith</td>
```

```
    </tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

7) Scenario 7:-

WebPage with left Navigation Pane  
using frames

How would you implement this using frames in HTML? Describe how you would set up the frameset and link behavior.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>frameset Example</title>
</head>
<frameset cols="20%, *">
    <frame src="navigation.html" name="nav">
    <frame src="main.html" name="main">
</frameset>
</html>
```

8) Scenario 8:-

WebPage with TOP Document and Bottom Footer.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Top and Bottom - frameset</title>
</head>
<frameset rows="70%, 30%">
    <frame src="document.html" name="top">
    <frame src="footer.html" name="bottom">
</frameset>
```

<frameset>  
<html>

scenario 9: how to make a three column layout with Resizable center

<!DOCTYPE html>  
<html lang="en">  
<head>  
<title>Three-column frameset</title>  
</head>  
<frameset cols="150px, \*, 150px">  
    <frame src="left.html" name="left" noresize>  
    <frame src="center.html" name="center">  
    <frame src="right.html" name="right" noresize>

</frameset>  
</html>

## Observation -2

### Scenario-1:-

You're building a one-page online resume for yourself. This page is standalone, meaning it won't be linked to any other pages on the web. You want to style it with a specific color scheme, font family, and layout, but you want to keep everything within HTML.

**Question:-** How would you apply styles to this resume directly within the HTML file.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My Resume </title>
    <style>
      body {
        font-family: Arial, sans-serif;
        color: #333;
        background-color: #fff;
        margin: 0;
        padding: 0;
      }
      container {
        width: 80%;
        margin: auto;
        background: #fff;
        padding: 20px;
        border-radius: 8px;
      }
    </style>
  </head>
  <body>
    <h1>Welcome to My Resume!</h1>
    <p>This is a one-page resume built entirely within an HTML file. It demonstrates how to use CSS to style the page without relying on external files like .css or .sass. The styling includes a clean, modern look with a white background, light gray text, and a rounded border for the main content area. The font used is Arial, which is a sans-serif typeface. The layout is simple, featuring a single heading and some descriptive text at the bottom. The overall design is minimalist and professional.</p>
  </body>
</html>
```

```
box-shadow: 0 0;  
h1, h2, h3 {  
    color: #007BFF;  
    font-size: 1.6em;  
}  
header {  
    text-align: center;  
    margin-bottom: 20px;  
}  
section {  
    margin-bottom: 20px;  
}  
<style>  
<head>  
<body>  
<div class="container">  
<div class="header">  
<h1>Meena </h1>  
<p>Web developer / Designer </p>  
<div>  
<div class="section">  
<h2>About Me </h2>  
<p>Passionate web developer with experience </p>  
<div>  
<div class="section">  
<h2>Skills </h2>  
<ul>  
<li>HTML, CSS, Java Script </li>  
<li>  
<div>  
<div class="section">
```

## <h2> Experience </h2>

<p> Previous roles & accomplishments in web development & design </p> - "A lot" boosts items

<div>

<div class="Footer">

<p> contact : ~~Deckshitha~~ deckshitha@gmail.com </p>

<div>

<div>

<div> address no of member </div>

<body> No bottom border no borders </body>

</html> - could not find out.

## Output:-

### My Resume.

Deckshitha - web developer/designer

Passionate web developer with experience.

Experience Previous roles & accomplishment.

Skills:- HTML, CSS.

contact :-

Deckshitha@gmail.com.

## Scenario-2:-

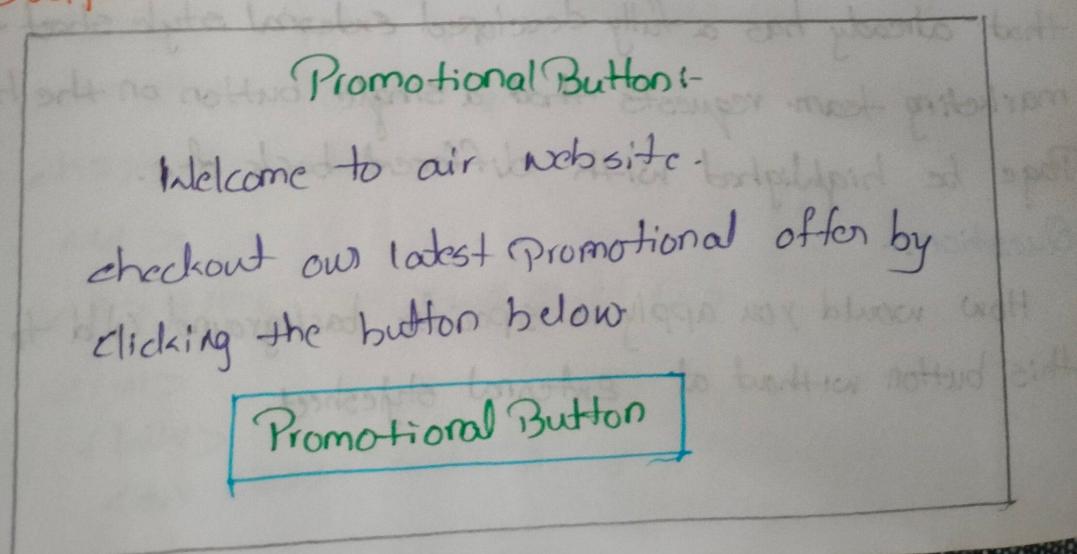
You are tasked with making quick adjust to a web page that already has a fully developed external style sheet. The marketing team requests that a single button on the home page be highlighted with different background.

## Question:-

How would you apply a specific background color to this button without an external stylesheet.

```
<!DOCTYPE html>
<html lang = "en">
<head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width,
        initial-scale=1.0">
<title> Promotional Button </title>
</head>
<body>
    <h1> welcome to our website ! </h1>
    <p> checkout our latest promotional offer by clicking
        the button below: </p>
    <button style = "background-color: #ff5733;
        color: white;
        padding: 10px 20px;
        border: none;
        border-radius: 5px;
        cursor: pointer;">
        Promotional Button
    </button>
</body>
</html>
```

### Output:-



### Scenario -3

You are working on a large website with multiple pages, all of which need to have a consistent design. The site already uses an external CSS file for styling.

Question:- How would you efficiently apply new styles across all Pages of website.

#### HTML code

```
<!DOCTYPE html>
<html lang = "en">
<head>
    <meta charset = "UTF-8">
    <meta name = "viewport" content = "width=device-width,
        initial-scale=1.0">
<title> my website </title>
<link rel = "stylesheet" href = "styles.css">
</head>
<body>
    <header>
        <h1> welcome to my website </h1>
    </header>
    <div class = "container">
        <p> this is a sample Paragraph on homepage </p>
        <button> click me </button>
    </div>
    </body>
</html>
```

## CSS code :-

```

root {
    --Primary-color: #3498db;
    --Secondary-color: #2ecc71;
    --text-color: #333;
    --background-color: #fufufu;
    --font-primary: Roboto, sans-serif;
}

body {
    font-family: var(--font-primary);
    background-color: var(--background-color);
    color: var(--text-color);
    margin: 0;
    padding: 20px;
}

header {
    text-align: center;
    padding: 20px;
    background-color: var(--primary-color);
    color: white;
}

header h1 {
    font-family: var(--font-secondary);
    font-size: 2.5cm;
    margin: 0;
}

header p {
    font-size: 1.2cm;
}

section {
    margin: 20px 0;
}

```

button {

padding: 10px 20px;

border: none;

border-radius: 5px;

cursor: pointer;

}

\*btn-primary {

background-color: var(--Primary-color);

color: white;

4.

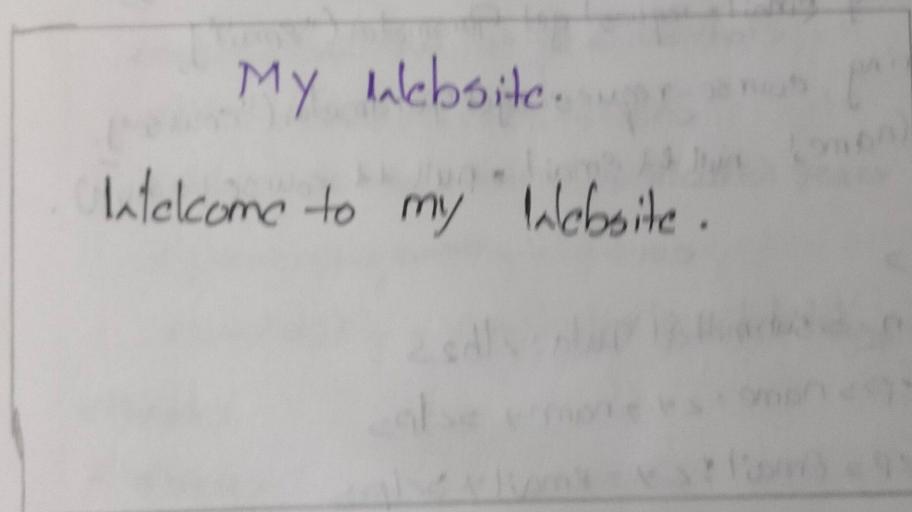
\*btn-secondary {

background-color: var(--Secondary-color);

color: white;

5.

Output:-



Scenario-4:- A university Portal requires a JSP Page for students to register for Workshops by submitting their name, Email and course. Submitted information should display on the same Page.

Question:- Write a JSP Page that includes HTML.

JSP code:-

```
<%@ Page import = "java.io.*", java.util.Scanner, java.  
Scanner http://> %>  
<html>  
<body>  
    <form method = "Post">  
        name:<input type = "text" name = "name"><br>  
        Email:<input type = "email" name = "Email"><br>  
        course:<input type = "text" name = "course"><br>  
        <input type = "submit" value = "Register">  
    </form>  
<%  
    String name = request.getParameter("name");  
    String Email = request.getParameter("Email");  
    String course = request.getParameter("course");  
    if(name == null && Email == null && course != null).  
    {  
        //  
        <n=>Submitted Data:<h2>  
        <p>Name:<u>name</u></p>  
        <p>Email:<u>Email</u></p>  
        <p>Course:<u>course</u></p>  
    }  
%>  
</body>  
</html>
```

### Output:-

Submitted Data:

Name: Alice.

Email: alice@gmail.com.

course: Java Programming.

### Scenario-5:-

A library maintains its book catalog in XML format, requiring an XSD schema with specific constraints (ISBN must be 13 digits, Publication year is 4 digits, and availability is either "Available" or "checked out").

### XML Document:-

```
<catalog>
  <book>
    <title>Effective Java</title>
    <author>Vishnu Priya</author>
    <isbn>9781034685991</isbn>
    <publicationyear>2018</publicationyear>
    <genre>Programming</genre>
    <availability>Available</availability>
  </book>
</catalog>
```

### XSD Schema:-

```
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:element name="catalog">
    <xsd:complexType>
      <xsd:sequence>
        <xsd:element name="book" maxOccurs="unbounded">
```

<xsd: complexTypes>

<xsd: sequence>

<xsd: element name="title" type="xsd:string"/>

<xsd: element name="author" type="xsd:string"/>

<xsd: element name="isbn" type="xsd:string" pattern  
= "Id{13}"/>

<xsd: element name="publicationYear">

type="xsd:int" minInclusive="10" maxInclusive="9999"/>

<xsd: element name="genre" type="xsd:string"/>

<xsd: element name="availability" type="xsd:string"/>

<xsd: simpleTypes>

<xsd: restriction base="xsd:string"/>

<xsd: enumeration value="Available"/>

<xsd: enumeration value="check"/>

<xsd: restrictions>

<xs:simpleTypes>

<xs: element>

<xs: sequence>

<xs: complexTypes>

<xs: elements>

<xs: sequences>

<xs: complexTypes>

<xs: elements>

<xs: schemas>

## Output:-

### Library Catalog:

Book Title: Effective Java

Author: vishnu

ISBN: 9870134685991

Publication year: 2018

Genre: Programming

Availability: Available

**Scenario-6:-** An online news website needs to display articles stored in XML format in a user-friendly HTML format. Each article includes a title, author, date, summary and content.

### XML Data:-

<articles>

<article>

<title> Breaking News </title>

<author> vishnu </author>

<date> 2024-09-11 </date>

<summary> summary of this article </summary>

<content> full content of the article </content>

</article>

</articles>

### XSLT code:-

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.1">

<xsl:template match="/articles">

<html>

study

case to each stud - "stud"

class to each value of stud - "stud">.value  
value of stud - "stud".value

property value of stud "color" <stud>.color

class to each value of stud - "stud".value

length value of stud - "stud".length

Class - for Earth

study

study -

class - template

class - style sheet

output

Breaking news - 2024-09-11

By prishu

Summary - (This is the) summary of the article

content - (This is the) full content of the article

Providing detailed information.

Scenarios :- Write an SQL query to load the user data into an HTML table

new sample Data -

content

content

enter Technology relevant data

content - user details

date 2024-09-01 date

summary > explores the latest trends in technology

summary

content > from AI to blockchain, technology is evolving

666

<content>

<articles>

<articles>

XSLT code:-

```
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999-
```

```
xsl:transform" version="1.0">
```

```
<xsl:template match="articles">
```

```
    <html>
```

```
        <body>
```

```
            <xsl:for-each select="article">
```

```
                <h2><h2> <xsl:value-of select="title"/>
```

```
                - <xsl:value-of select="data"/></h2>
```

```
</h2>
```

```
            <p><xsl:value-of select="content"/></p>
```

```
        </xsl:for-each>
```

```
    </body>
```

```
</html>
```

```
</xsl:template>
```

```
</xsl:stylesheet>
```

Output:-

Technology Advancements - 2024-09-12

By: Vishnu.

summary: Explores the latest trends in technology covered

content: from AI to blockchain, technology is evolving.