

BASIC HTML TAGS**AIM:**

To create a simple html file to demonstrate the use of different tags such as heading tags <h1>...<h6>, <p>,
, , <u>, <i>, <align> tag with <p> tag/heading tags, <bgcolor> with <body> tag, <marquee> tag, <a> tag and tag.

SOURCE CODE:

```
<html>

    <head>

        <title>Tags in HTML</title>

    </head>

    <body>

        <h1>HTML Tags Demo</h1>

        <h1>Heading Tag level :1</h1>

        <h2>Heading Tag level :1</h2>

        <h3>Heading Tag level :1</h3>

        <h4>Heading Tag level :1</h4>

        <h5>Heading Tag level :1</h5>

        <h6>Heading Tag level :1</h6>


        <p>This is a <b>bold</b> paragraph with some <i>italized</i> text and
<u>underlined</u> text. </p>

        <p align="center">this is aligned to the centre.</p>

        <p>The line break command "br" <br> is used to break lines. </p>

        <marquee>This is a marquee line. </marquee>

        <p>This link: <a href="">example</a> points to an example website</p>


        <br>

        this is an image:

        
```

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

RESULT:

An HTML page is obtained that includes all different kinds of HTML tags is formed.

HTML LISTS**AIM:**

Create a web page which contains notes on lists in HTML (ordered and unordered).

SOURCE CODE:

```
<html>

  <head>

    <title>List's in HTML</title></head>

  <body>

    <h1>HTML Lists</h1>

    <h2>Ordered Lists :</h2>

    <p>Ordered lists are used when the order of items matters. They're created
using the "ol" tag.</p>

    <ol>

      <li>First Item</li>

      <li>Second Item</li>

      <li>Third Item</li>

    </ol>

    <h2>Unordered Lists :</h2>

    <p>Unordered lists are used when the order of items is irrelevant. They're
created using the "ul" tag.</p>

    <ul>

      <li>First Item</li>

      <li>Second Item</li>

      <li>Third Item</li>

    </ul>

    <h2>Nested Lists</h2>

    <p> nested lists are lists fomed within lists:</p>
```

```
<ul>
  <li>Main Item 1
    <ul>
      <li>Sub item 1</li>
      <li>Sub item 2</li>
    </ul>
  </li>
  <li>Main Item 2</li>
</ul>
</body>
</html>
```

RESULT:

An HTML page is obtained that implements ordered and unordered lists, on its corresponding notes.

HTML PAGE WITH IMAGES AND TABLES**AIM:**

Create a static webpage for your college with the following information:

- a) Name of college (First level heading, text align = center, color = blue, use style attribute)
- b) Add vision and mission of the college as scrolling text (color = green)
- c) About us (Second level heading, background-color = red, color = white, use style attribute)
 - i. Insert an image of your college.(Align image in center, width = 1000px, height = 300px)
 - ii. Add a brief description about your college. (justified paragraph)
- d) Courses Offered (Second level heading, background-color = red, color =white, use style attribute)
 - i. Add a brief description about courses offered. (justified paragraph)
Add course details (Use HTML table)
 - ii. Contact us. (Second level heading, background-color = red, color = white)
Address for Communication (Third level heading, color = blue)
Address of the college
Add Link to the official website of the college.

SOURCE CODE:

```
<html>
  <head>
    <title>College Webpage</title>
  </head>
  <body>
    <h1 style="text-align: center; color: blue;">RIT College</h1>
    <marquee style="color: green;">
      Our Vision: To create leaders in technology. Our Mission: Excellence in education,
      innovation, and research.
    </marquee>
    <h2 style="background-color: red; color: white; padding: 10px;">About Us</h2>
    
```

<p style="text-align: justify;">

RIT College is a premier institution offering a world-class education. With state-of-the-art facilities, experienced faculty, and a commitment to innovation, RIT nurtures talent and prepares students for global challenges.

</p>

<h2 style="background-color: red; color: white; padding: 10px;">Courses Offered</h2>

<p style="text-align: justify;">

RIT offers a wide range of undergraduate and postgraduate programs designed to equip students with the skills and knowledge

required to excel in their chosen fields.

</p>

<table border="2" style="border-collapse: collapse; width: 100%;">

<tr>

<th>Course</th>

<th>Department</th>

<th>Intake</th>

</tr>

<tr>

<td rowspan="6">B. Tech</td>

<td>Civil Engineering</td>

<td>66*</td>

</tr>

<tr>

<td>Mechanical Engineering</td>

<td>66*</td>

</tr>

<tr>

<td>Electrical & Electronics Engineering</td>

<td>66*</td>

</tr>

<tr>

<td>Electronics & Communication Engineering</td>

<td>66*</td>

```

</tr>
<tr>
  <td>Computer Science & Engineering</td>
  <td>66*</td>
</tr>
<tr>
  <td>Robotics & Artificial Intelligence</td>
  <td>30</td>
</tr>
<tr>
  <td>B. Arch</td>
  <td>Architecture</td>
  <td>40</td>
</tr>
</table>

<h2 style="background-color: red; color: white; padding: 10px;">Contact Us</h2>
<h3 style="color: blue;">Address for Communication</h3>
<p>Velloor PO, Pampady, Kottayam, 686501 </p>
<p>
  Visit our official website:
  <a href="https://www.rit.ac.in" >RIT College Official Website</a>
</p>
</body>
</html>

```

RESULT:

The webpage contains the heading 1 in blue, aligns center, scrolling text, 'About Us' section with white text on red background and image of collage in center with a small description.

HTML PAGE WITH HYPERLINKS**AIM:**

Create an attractive webpage showing the images and description of at least three festivals in India. Set width and height of the images as 500px and 700px respectively. When an image of a festival is clicked, user must redirect to another webpage showing details of that festival. The new webpage should be opened in another tab.

SOURCE CODE:

program4.html

```
<html>

  <head> <title>Indian Festivals</title></head>

  <body>

    <h1>Indian Festivals</h1>

    <h2>Holi</h2>

    <a href="holi.html"> </a>

    <p> Holi is one of the famous festivals in India. Known as the festival of
colors.</p>

    <br>

    <h2>Diwali</h2>

    <a href="diwali.html"></a>

    <p> Diwali is a widely celebrated festival, also known as the festival of
lights.</p>

    <br>

    <h2>Onam</h2>

    <a href="onam.html"></a>

    <p> Onam is celebrated n the southern parts of India, primarily in Kerala.</p>

    <br>

  </body>

</html>
```

holi.html


```
<head>

  <title>Holi</title>

</head>

<body>

  <h1>Holi - Festival of Colors</h1>

  <p>Holi is a vibrant and colorful festival celebrated across India. It marks the arrival of
spring and the triumph of good over evil. During Holi, people play with colors, sing songs,
and enjoy festive foods.</p>

  <p><a href="program4.html">Back to Festivals</a></p>

</body>

</html>
```

diwali.html

```
<html>

<head>

  <title>Diwali</title>

</head>

<body>

  <h1>Diwali - Festival of Lights</h1>

  <p>Diwali, also known as Deepavali, is one of the most popular festivals in India. During
this festival, people light diyas (lamps), burst crackers, and share sweets with friends and
family. </p>

  <p><a href="program4.html">Back </a></p>

</body>

</html>
```

onam.html

```
<html>

<head>

  <title>Onam</title>

</head>

<body>
```

```
<h1>Onam - Festival of Kerala</h1>

<p>Onam is a major harvest festival celebrated in Kerala. During Onam, people create
floral decorations (Pookalam), enjoy grand feasts (Onasadya)< p>

<p><a href="program4.html">Back </a></p>

</body>

</html>
```

RESULT:

An initial page featuring festivals of India is obtained, which on clicking any of the images, redirects to a dedicated page describing the respective festival in more detail.

HTML PAGE WITH FRAMES**AIM:**

Using HTML Iframes create a webpage with two frames. One frame contains list of items as hyperlinks - Fruits, Vegetables, Flowers and Trees. When an item is selected, details and images of the selected item should be displayed on right frame.

SOURCE CODE:iframe.html

```
<html>

    <head>

        <title>iframe</title>

    </head>

    <body>

        <iframe src="links.html" name="menu" title="menu" width=810px></iframe>

        <iframe src="content.html" name="content" title="content"
width=810px></iframe>

    </body>

</html>
```

links.html

```
<html>

    <head>

        <title>links</title>

    </head>

    <body>

        <a href="Fruit.html" target="content">Fruit</a><br>

        <a href="Vegetable.html" target="content">Vegetable</a><br>

        <a href="Flower.html" target="content">Flower</a><br>

        <a href="Trees.html" target="content">Tree</a><br>

    </body>
```

```
</html>
```

content.html

```
<html>
  <head>
    <title>content</title>
  </head>
  <body>
    <p>..select any of the items..</p>
  </body>
</html>
```

Fruit.html

```
<html>
  <head>
    <title>Fruit</title>
  </head>
  <body>
    
    <p>..fruits..</p>
  </body>
</html>
```

Vegetable.html

```
<html>
  <head>
    <title>Vegetable</title>
  </head>
  <body>
    
```

```
        <p>..vegetable..</p>
    </body>
</html>
```

Flower.html

```
<html>
    <head>
        <title>Flower</title>
    </head>
    <body>
        
        <p>..flower..</p>
    </body>
</html>
```

Trees.html

```
<html>
    <head>
        <title>Trees</title>
    </head>
    <body>
        
        <p>tree..</p>
    </body>
</html>
```

RESULT:

A webpage containing two frames are obtained, with one of the frames displaying the links, and the other, the link contents, on the clicking of links on the other.

HTML FORM**AIM:**

Create a Student Registration Form.

SOURCE CODE:

```
<html>

<body>

  <h2 style="text-align:center">STUDENT REGISTRATION FORM</h2>

  <form>

    <table align="center" border="1" cellpadding="10">

      <tr>

        <td>FIRST NAME</td>

        <td><input type="text" maxlength="30">(max 30 Characters)</td>

      </tr>

      <tr>

        <td>LAST NAME</td>

        <td><input type="text" maxlength="30">(max 30 Characters)</td>

      </tr>

      <tr>

        <td>DATE OF BIRTH</td>

        <td>

          <select>

            <option>1</option> <option>2</option> <option>3</option>

            <option>4</option> <option>5</option> <option>6</option>

            <option>7</option> <option>8</option> <option>9</option>

            <option>10</option> <option>11</option> <option>12</option>

            <option>13</option> <option>14</option> <option>15</option>

            <option>16</option> <option>17</option> <option>18</option>

            <option>19</option> <option>20</option> <option>21</option>

          </select>

        </td>

      </tr>

    </table>

  </form>

</body>

</html>
```

```

        <option>22</option> <option>23</option> <option>24</option>
        <option>25</option> <option>26</option> <option>27</option>
        <option>28</option> <option>29</option> <option>30</option>
        <option>31</option>
    </select>
    <select>
        <option>Jan</option> <option>Feb</option> <option>Mar</option>
        <option>Apr</option> <option>May</option> <option>Jun</option>
        <option>Jul</option> <option>Aug</option> <option>Set</option>
        <option>Oct</option> <option>Nov</option> <option>Dec</option>
    </select>
    <select>
        <option>1996</option> <option>1997</option> <option>1998</option>
        <option>1999</option> <option>2000</option> <option>2001</option>
        <option>2002</option> <option>2003</option> <option>2004</option>
    </select>
</td>
</tr>
<tr>
    <td>EMAIL-ID</td> <td><input type="email" ></td>
</tr>
<tr>
    <td>MOBILE NUMBER</td>
    <td><input type="text" maxlength="10">(10 digit number)</td>
</tr>
<tr>
    <td>GENDER</td>
    <td><input type="radio" name="gen" value="MALE">Male<input type="radio"
name="gen" value="FEMALE">Female</td>
</tr>
<tr>

```

```

        <td>ADDRESS</td> <td><textarea rows="3" cols="25"></textarea></td>
</tr>
<tr>
        <td>CITY</td> <td><input type="text">(max 30 Characters)</td>
</tr>
<tr>
        <td>PINCODE</td> <td><input type="text">(6-digit number)</td>
</tr>
<tr>
        <td>STATE</td> <td><input type="text">(max 30 Characters)</td>
</tr>
<tr>
        <td>COUNTRY</td> <td><input type="text" value="INDIA"></td>
</tr>
<tr>
        <td>HOBBIES</td>
        <td><input type="checkbox">Drawing<input type="checkbox">Singing<input
type="checkbox">Dancing<input type="checkbox">Sketching<br> <input
type="checkbox">Others<input type="text">
        </td>
</tr>
<tr>
        <td>QUALIFICATION</td>
        <td>
                <table border="1" cellpadding="5">
                        <tr>
                                <th>SI NO:</th>
                                <th>Examination</th>
                                <th>Board</th>
                                <th>Percentage</th>
                                <th>Year of Passing</th>

```



```

</tr>
<tr>
  <th>1</th>
  <th>Class X</th>
  <td><input type="text" maxlength="10"></td>
  <td><input type="text" maxlength="5"></td>
  <td><input type="text" maxlength="4"></td>
</tr>
<tr>
  <th>2</th>
  <th>Class XII</th>
  <td><input type="text" maxlength="10"></td>
  <td><input type="text" maxlength="5"></td>
  <td><input type="text" maxlength="4"></td>
</tr>
<tr>
  <th>3</th>
  <th>Graduation</th>
  <td><input type="text" maxlength="10"></td>
  <td><input type="text" maxlength="5"></td>
  <td><input type="text" maxlength="4"></td>
</tr>
<tr>
  <th>4</th>
  <th>Masters</th>
  <td><input type="text" maxlength="10"></td>
  <td><input type="text" maxlength="5"></td>
  <td><input type="text" maxlength="4"></td>
</tr>
</table>

```

```

        </td>
    </tr>
    <tr>
        <td>COURSES<br>APPLIED FOR</td>
        <td>MCA<input type="radio">M.Tech<input type="radio">M.Sc.<input
type="radio">PhD<input type="radio"></td>
    </tr>
    <tr>
        <td>TYPE YOUR PASSWORD</td>
        <td><input type="password">(Max. 30 Characters)</td>
    </tr>
    <tr>
        <td>UPLOAD YOUR PHOTO</td> <td><input type="file"></td>
    </tr>
    <tr>
        <td>DATE OF TC</td> <td><input type="date"></td>
    </tr>
    <tr>
        <td colspan="2" align="center"><input type="submit" value="SUBMIT"><input
type="reset"></td>
    </tr>
</table>
</form>
</body>
</html>

```

RESULT:

A corresponding student registration page is formed using forms in html.

HTML PAGE WITH INTERNAL STYLESHEET**AIM:**

Using Internal style sheets, create a web page showing a biodata, in the following style:

- a. Put Name in <h1> tag, center aligned.
- b. Add following via <h2> tags, Personal Details, Educational Details, Hobbies.
Put the respective contents below, in list format.
- c. Add contact details at the bottom including mail id and mobile number.
- d. Style all <h1> tags as red colored and center aligned and all <h2> tags as white colored with background color blue.
- e. Display <p> elements with a border
- f. Change the background color of the page to yellow

SOURCE CODE:

```
<html>
<head>
  <title>Biodata</title>
  <style>
    body {
      background-color: yellow;
    }
    h1 {
      color: red;
      text-align: center;
    }
    h2 {
      color: white;
      background-color: blue;
      padding: 5px;
      border-radius: 10px;
    }
  </style>
</head>
<body>
  <h1>Biodata</h1>
  <h2>Personal Details</h2>
  <p>Name: <input type="text"></p>
  <p>Age: <input type="text"></p>
  <h2>Educational Details</h2>
  <p>Education: <input type="text"></p>
  <h2>Hobbies</h2>
  <p>Hobbies: <input type="text"></p>
  <h2>Contact Details</h2>
  <p>Mail id: <input type="text"></p>
  <p>Mobile number: <input type="text"></p>
</body>
</html>
```

```

p {
    border: 1px solid black;
    padding: 5px;
    border-radius: 10px;
}
ul {
    list-style-type: square;
    padding: 10px;
}
.contact {
    text-align: center;
    font-size: 20px;
    font-weight: bold;
}
</style>
</head>
<body>
<h1>Vinayak Santhosh</h1>
<h2>Personal Details</h2>
<ul>
<li>Age: 21</li>
<li>Gender: Male</li>
<li>Address: Sivasudham H, Ettumanoor P.O, Ettumanoor</li>
<li>Nationality: Indian</li>
</ul>
<h2>Education Details</h2>
<ul>
<li>Bachelor of Computer Application</li>
</ul>

```

```
<h2>Hobbies</h2>

<ul>

  <li>Reading books</li>

  <li>Playing chess</li>

</ul>

<div class="contact">

  Contact Me:<br>

  Email: vinayak@example.com<br>

  Mobile: 123-456-7890

</div>

</body>

</html>
```

RESULT:

A webpage showcasing a biodata was successfully created using internal CSS. The design includes a red, center-aligned <h1> tag for the name, and white <h2> tags with a blue background for sections like Personal Details, Educational Details, and Hobbies. The content beneath each section is displayed as lists, and <p> elements are styled with a border. The page background is set to yellow, and contact details, including email and mobile number, are displayed at the bottom.

HTML PAGE WITH EXTERNAL STYLESHEET**AIM:**

Using External Style Sheets, create a web page with following styles:

- a. Create different paragraphs defining different selectors in CSS. Each paragraph should be defined with appropriate labels for making styles of each selector.
- b. Style each selector with unique font color, and background color

SOURCE CODE:Index.html

```
<html>

<head>

    <title>External Style Sheet Example</title>

    <link rel="stylesheet" type="text/css" href="c2p2.css">

</head>

<body>

    <h1>This is an h1 heading</h1>

    <h2>This is an h2 heading</h2>

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

    <p class="class-selector">This paragraph has a class selector.</p>

    <p id="unique-id">This paragraph has a unique ID.</p>

    <p id="unique-id" class="id-selector">This paragraph has both ID and class.</p>

</body>

</html>
```

c2p2.css

```
h1 {

    color: blue;
```

```
    background-color: yellow;
    text-align: center;
}
h2 {
    color: white;
    background-color: green;
    padding: 10px;
}
p {
    color: black;
    background-color: lightgray;
    padding: 10px;
    border: 1px solid black;
}
```

```
/* styles for classes */
```

```
.id-selector {
    color: red;
    background-color: black;
    padding: 10px;
}
.class-selector {
    color: orange;
    background-color: purple;
    padding: 10px;
}
```

```
/* style for ID */
```

```
#unique-id {
    color: pink;
```

```
background-color: brown;  
padding: 10px;  
}
```

RESULT:

A webpage was created using external CSS to style paragraphs with different selectors. Each selector has unique font and background colors, showcasing the flexibility of external styling.

HTML PAGE WITH STRIPPED TABLE USING CSS**AIM:**

Create a stripped table using CSS.

- a) Use Id attribute of the table as CSS Selector.
- b) Table header must have 20px top and bottom padding, left text align, white text color, background color as #b22222, 1px solid grey color top, bottom, left and right borders.
- c) Each table data/cell must have 8px padding on four sides.
- d) Each table data/cell must have 1px solid grey color top, bottom, left and right borders.
- e) Table borders should be collapsed into a single border.
- f) Table width should be 100% of the document body and use sans-serif font family.
- g) Highlight table rows on mouse over by setting 'burlywood' background color.
- h) Add background-color #f2f2f2 to all even table rows.

SOURCE CODE:

[c2p3.html](#)

```
<html>

<head>

  <title>Sample Output Table</title>

  <link rel="stylesheet" href="c2p3.css">

</head>

<body>

  <table id="sTable">

    <thead>

      <tr>

        <th>SL.No:</th>

        <th>Admission No:</th>

        <th>Name</th>

        <th>Email Id</th>

      </tr>

    </thead>
```

```

<tbody>
  <tr>
    <td>1</td> <td>101</td> <td>Amal</td> <td>amal101@rit</td>
  </tr>
  <tr>
    <td>2</td> <td>102</td> <td>Nisha</td> <td>nisha102@rit</td>
  </tr>
  <tr>
    <td>3</td> <td>103</td> <td>Reji</td> <td>reji103@rit</td>
  </tr>
  <tr>
    <td>4</td> <td>104</td> <td>Waseem</td> <td>waseem104@rit</td>
  </tr>
</tbody>
</table>
</body>
</html>

```

c2p3.css

```

body {
  font-family: sans-serif;
  background-color: white;
  margin: 20px;
}
#sTable {
  width: 100%;
  border-collapse: collapse;
  margin-top: 20px;
}

```

```

#sTable th {
    padding: 20px 0;
    text-align: left;
    color: white;
    background-color: #b22222;
    border: 1px solid grey;
}

#sTable td {
    padding: 8px;
    border: 1px solid grey;
}

/* Zebra Striping */
#sTable tbody tr:nth-child(even) {
    background-color: #f2f2f2;
}

/* Highlight Row on Hover */
#sTable tbody tr:hover {
    background-color: burlywood;
}

```

RESULT:

A resultant HTML page is formed which contains a stripped table defined using css.

HTML PAGE WITH IMAGE ALIGNED USING CSS**AIM:**

Create a webpage with a center aligned Image using CSS.

SOURCE CODE:

```
<html>
<head>
  <title>centered image using css</title>
<style>
  .center{
    display:block;
    width:500px;
    margin-left:auto;
    margin-right:auto;
  }
</style>
</head>
<body>
  <p style="background-color:red;">Centered Image</p>
  
  <p style="background-color:red">RIT Engineering College</p>
</body>
</html>
```

RESULT:

The resultant HTML page demonstrates an image aligned using CSS.

HTML PAGE WITH NAVIGATION BAR USING CSS**AIM:**

Create a fixed full size side navigation bar using CSS.

a) Create a div tag with class name 'sidenav' and hyperlinks – About us, Departments, Vision and Mission and Contact us.

b) Create a div with class name 'main' and h1 tag for heading 'side bar example'.

c) CSS for anchor tag

- Set as Block element.
- Text decoration none
- Top, right, bottom, left padding 6px, 8px, 6px and 16px respectively.
- Text color white.

d) CSS for side nav div tag

- Height stretches full document height.
- Width 160px, Padding top 20px.
- Background color green.
- Use position, top, left properties to create a fixed full size side navigation bar on top left corner.
- Highlight menus on mouse over by setting 'red' Text color.

e) CSS for main div tag

- Left margin should be same as the width of the sidenav div.
- Top and bottom paddings are 0px
- Right and left paddings are 10px
- Set 2000px as height.

SOURCE CODE:

c2p5.html

```
<html>
```

```
<head>
```

```
  <style>
```

```
    .sidenav {
```

```
      height: 100%;
```

```
      width: 160px;
```

```
      position: fixed;
```

```
      top: 0;
```

```
      left: 0;
```

```
      background-color: green;
```

```
      padding-top: 20px;
```

```
    }
```

```
    .sidenav a {
```

```
      display: block;
```

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

```
      color: white;
```

```
      padding: 6px 8px;
```

```
    }
```

```
    .sidenav a:hover {
```

```
      color: red;
```

```
    }
```

```
    .main {
```

```
      margin-left: 160px;
```

```
      padding: 10px;
```

```
      height: 2000px;
```

```
    }
```

```
  </style>
```

```
</head>
```

```

<body>
  <div class="sidenav">
    <a href="about.html">About Us</a>
    <a href="department.html">Departments</a>
    <a href="vision.html">Vision and Mission</a>
    <a href="contact.html">Contact Us</a>
  </div>
  <div class="main">
    <h1>Side Bar Example</h1>
  </div>
</body>
</html>

```

about.html

```

<html>
<head>
  <title> About Us</title>
</head>
<body>
  <h1>About Us</h1>
  <p>Rajiv Gandhi Institute of Technology, named after the late Prime Minister, is an
undertaking of the Government of Kerala, it started functioning in 1991.</p>
  <p>The institution has become one of the leading technical Institutes in Kerala.</p>
</body>
</html>

```

department.html

```

<html>
<head>
  <title> Department</title>
</head>
<body>
  <h1>Department</h1>
  <p>In RIT, the <b>Master of Computer Applications(MCA)</b> department/course began
in the year 2001.</p>

```

```
<p>This post graduate course aims to mould professionals to meet the complex demands of the IT industry.</p>
```

```
</body>
```

```
</html>
```

vision.html

```
<html>
```

```
<head>
```

```
<title>Vision Mission</title>
```

```
</head>
```

```
<body>
```

```
<h1>Vision and Mission</h1>
```

```
<p>Be a center of technological excellence for the betterment of society</p>
```

```
</body>
```

```
</html>
```

contact.html

```
<html>
```

```
<head>
```

```
<title>Contact</title>
```

```
</head>
```

```
<body>
```

```
<h1>Address</h1>
```

```
<p>Velloor PO<br>Pampady<br>Kottayam - 686501</p>
```

```
</body>
```

```
</html>
```

RESULT:

The HTML page to demonstrate Navigation bar using CSS has been designed.

CHANGE BACKGROUND COLOUR OF WEBPAGE USING JAVASCRIPT**AIM:**

Develop a web application using JavaScript to change the background color of the webpage when the following events of the button “change background color” occur.

- a. Double click – background color changed to green.
- b. Single click – background color changed to red.

SOURCE CODE:

```
<html>
<head>
  <title>Change Background Color</title>
  <style>
    body{
      text-align:center;
    }
  </style>
</head>
<body>
  <button id="button">Change Background Color</button>
  <br><br>
  <p>Single-click changes color to Red.<br><br>Double-click changes color to Green.</p>

  <script>
    const button = document.getElementById('button');
    function changeToRed() {
      document.body.style.backgroundColor = 'red';
    }

    function changeToGreen() {
      document.body.style.backgroundColor = 'green';
    }
  </script>
</body>
</html>
```

```
        button.addEventListener('click', changeToRed);  
        button.addEventListener('dblclick', changeToGreen);  
    </script>  
</body>  
</html>
```

RESULT:

A webpage containing a button is obtained, which changes the background color to Red on single click and Green on double-click.

CHANGE IMAGES IN WEBPAGE USING JAVASCRIPT**AIM:**

Create a web application using JavaScript to turn on / off the given light bulb.

SOURCE CODE:

```
<html>
<head>
  <title>Light Bulb </title>
  <style>
    body{
      text-align:center;
    }
  </style>
</head>
<body>

  

  <br><br>

  <script>

    function turnOn() {
      document.getElementById('bulb').src = 'bulb_on.png';
    }

    function turnOff() {
      document.getElementById('bulb').src = 'bulb_off.png';
    }
  </script>
```

```
<button onclick="turnOn()">Turn on the light</button>
```

```
<button onclick="turnOff()">Turn off the light</button>
```

```
</body>
```

```
</html>
```

RESULT:

A webpage containing two buttons, one which turns on and the other turns off a bulb (png), on clicking is obtained.

VALIDATE INPUT FIELDS IN A FORM USING JAVASCRIPT**AIM:**

Develop a web application using JavaScript to validate the Name, Email and Mobile number fields of a student registration form.

SOURCE CODE:

```
<html>

<head>

<title>Student Registration Form</title>

<script>

function validateRegForm() {

    var firstName = document.regForm.firstName.value;

    var lastName = document.regForm.lastName.value;

    var email = document.regForm.email.value;

    var mobile = document.regForm.mobile.value;

    var namePattern = /^[A-Za-z]+$;/

    if (firstName == "") {

        alert("Enter First Name!");

        document.regForm.firstName.focus();

        return false;

    } else if (!namePattern.test(firstName)) {

        alert("Enter a valid First Name (letters only)!");

        document.regForm.firstName.focus();

        return false;

    }

    if (lastName != "" && !namePattern.test(lastName)) {

        alert("Enter a valid Last Name (letters only)!");

        document.regForm.lastName.focus();

        return false;

    }

}
```

```

    if (email == "") {
        alert("Enter Email ID!");
        document.regForm.email.focus();
        return false;
    }
    if (mobile == "") {
        alert("Enter Mobile Number!");
        document.regForm.mobile.focus();
        return false;
    } else if (isNaN(mobile)) {
        alert("Enter a valid Mobile Number (digits only)!");
        document.regForm.mobile.focus();
        return false;
    } else if (mobile.length != 10) {
        alert("Enter a 10-digit Mobile Number!");
        document.regForm.mobile.focus();
        return false;
    }
    return true;
}
</script>
</head>
<body>
    <h2 style="text-align:center;">STUDENT REGISTRATION FORM</h2>
    <form name="regForm" onsubmit="return validateForm()">
        <table align="center" border="1" cellpadding="10">
            <tr>
                <td>FIRST NAME</td>
                <td><input type="text" name="firstName" maxlength="30">(max 30
Characters)</td>
            </tr>

```

```

<tr>
    <td>LAST NAME</td>
    <td><input type="text" name="lastName" maxlength="30">(max 30
Characters)</td>
</tr>
<tr>
    <td>EMAIL-ID</td>
    <td><input type="email" name="email"></td>
</tr>
<tr>
    <td>MOBILE NUMBER</td>
    <td><input type="text" name="mobile" maxlength="10">(10 digit number)</td>
</tr>
<tr>
    <td colspan="2">
        <center>
            <input type="submit" value="SUBMIT">
            <input type="reset" value="RESET">
        </center>
    </td>
</tr>
</table>
</form>
</body>
</html>

```

RESULT:

A resultant webpage containing a student registration form is created which performs form validation upon its input fields.