**DAYANANDA SAGAR
COLLEGE OF ENGINEERING**

AN AUTONOMOUS INSTITUTE
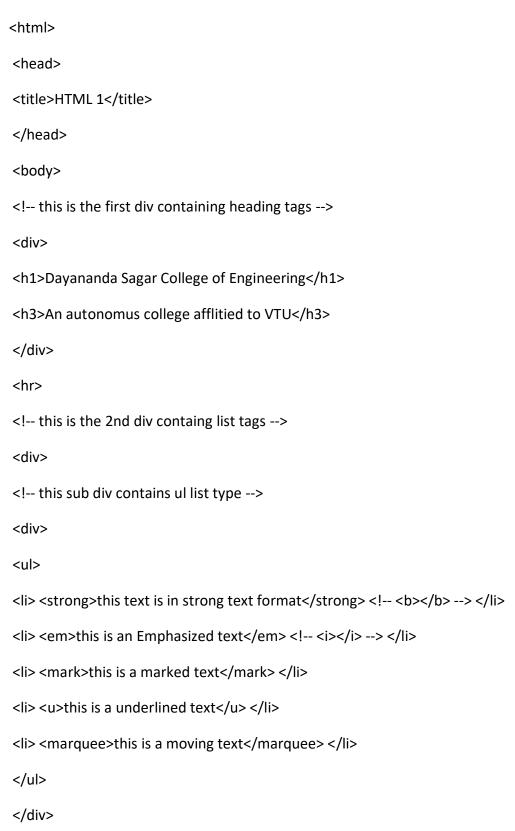
AFFILIATED TO VTU

APPROVED BY AICTE & UGC

ACCREDITED BY NAAC WITH 'A' GRADE

ACCREDITED BY NBA

WEB PROGRAMMING LAB MANUAL

1. **Create a HTML Program to display college webpage with a HTML table with information such as name, usn, department etc.,**

```html
<html>

<head>

<title>HTML 1</title>

</head>

<body>

<!-- this is the first div containing heading tags -->

<div>

<h1>Dayananda Sagar College of Engineering</h1>

<h3>An autonomus college afflitied to VTU</h3>

</div>

<hr>

<!-- this is the 2nd div containg list tags -->

<div>

<!-- this sub div contains ul list type -->

<div>

<ul>

<li> <strong>this text is in strong text format</strong> <!-- <b></b> --> </li>

<li> <em>this is an Emphasized text</em> <!-- <i></i> --> </li>

<li> <mark>this is a marked text</mark> </li>

<li> <u>this is a underlined text</u> </li>

<li> <marquee>this is a moving text</marquee> </li>

</ul>

</div>
```

```html
<hr>
<!-- this sub div contains ol list type -->
<div>
<ol type="A">
<li>first</li>
<li>second</li>
<li>third</li>
</ol>
</div>
</div>
<hr>
<!-- this div contains the table tag -->
<div>
<table border="2">
<tr>
<th>Name</th>
<th>Roll number</th>
<th>blood group</th>
<th>phone number</th>
</tr>
<tr>
<td>Adarsh</td>
<td>02</td>
<td>A<sup>+</sup></td>
<td>123456789</td> <!-- <sub>+</sub> -->
</tr>
```

```html
<tr>
<td>Aditya</td>
<td>03</td>
<td>B<sup>+</sup></td>
<td>123456789</td> <!-- <sub>+</sub> -->
</tr>
<tr>
<td>Aishwarya</td>
<td>04</td>
<td>O<sub>+</sub></td>
<td>123456789</td> <!-- <sub>+</sub> -->
</tr>
</table>
</div>
<hr>
<!-- this div contains the text tags -->
<div>
<p>
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco <br> laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.<br> Excepteur sint occaecat cupidatat non
</p>
</div>
</body>
</html>
```

2. **Create a HTML code with 2 WebPages where the first page consists of college name, college photo, logo, about and a button which when clicked takes the user to the previously created student table page**

```
<html>

 <head>

 <title>HTML 2</title>

 </head>

 <body>

 <!-- this div contains images -->

 <div class="images" id="photos">

 <img src="logo_dsc.png" alt="this is the logo" class="picture" id="logo">

 <img src="DSCE.jpg" alt="building" class="picture" id="dsce_photo">

 </div>

 <hr>

 <!-- this div contains anchor tag -->

 <div>

 <button type="button" onclick="location.href = 'path_to_first_html_file';">

     Next Page

 </button>

 <ul>

 <li><a href="www.google.com">Google</a></li>

 <li><a href="www.bing.com">Bing</a></li>

 <li><a href="www.duckduckgo.com">duckduckgo</a></li>

 </ul>

 </div>

 <hr>
```

```html
<!-- this dib contains form -->

<div>

<h2>FORM</h2>

<form>

<label for="fname">First name:</label>

<input type="text" name="fname">

<label for="lname">Last name:</label>

<input type="text" name="lname"> <br>

<input type="radio" id="html" name="lang" value="HTML">

<label for="html">HTML</label>

<input type="radio" id="css" name="lang" value="CSS">

<label for="css">CSS</label>

<input type="radio" id="javascript" name="lang" value="JavaScript">

<label for="javascript">JavaScript</label><br>

<input type="checkbox" id="dose1" name="dose1" value="dose1">

<label for="vehicle1"> dose1</label>

<input type="checkbox" id="dose2" name="dose2" value="dose2">

<label for="vehicle2">dose2</label>

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

<label for="vehicle3">booster</label> <br>

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

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

</form>

</div>

<hr>

<!-- this div contains the multimedia files tag -->
```

```html
<div>

<video width="320" height="240" controls>

<source src="earth.mp4" type="video/mp4">

</video>

<audio controls>

<source src="audio.mp3" type="audio/mpeg">

</audio>

</div>

</body>

</html>
```
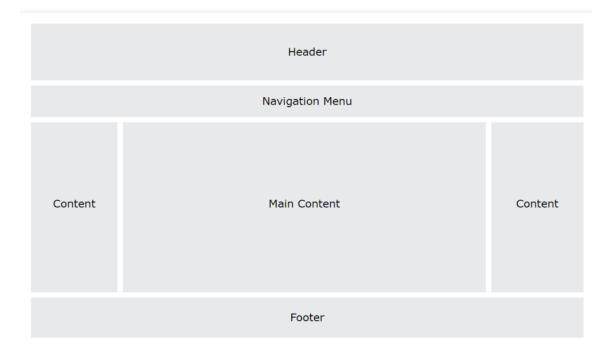
3. Demonstrate inline, embedded and external CSS with a simple HTML program to show styling basics

```html
<!DOCTYPE html>
<html>
<head>
<title>Inline CSS</title>
</head>
<body>
<p style = "color:#009900; font-size:50px;
font-style:italic; text-align:center;">
DSCE Web Programming
</p>
</body>
</html>
<!DOCTYPE html>
<html>
<head>
<title>Internal CSS</title>
```

```
<style>
.main {
text-align:center;
}
.DSCE {
color:#009900;
font-size:50px;
font-weight:bold;
}
. example {
font-style:bold;
font-size:20px;
}
</style>
</head>
<body>
<div class = "main">
<div class ="DSCE"> DSCE Web Programming </div>
<div class ="example">
Embedded CSS for web programming
</div>
</div>
</body>
</html>
body {
 background-color:powderblue;
}
.main {
 text-align:center;
}
.DSCE {
```

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```
 color:#009900;
 font-size:50px;
 font-weight:bold;
}
#example {
 font-style:bold;
 font-size:20px;
}
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="exampleFile.css"/>
</head>
<body>
<div class = "main">
<div class ="DSCE">Check out the external CSS</div>
<div id ="example">
A computer science portal for geeks
</div>
</div>
</body>
</html>
```

4. **Create a webpage with header, footer, navigation menu, content and main menu with CSS and HTML along with responsive tags**


```
<!DOCTYPE html>

<html>

<head>

<style>

* {

 box-sizing: border-box;

}

body {

 font-family: Arial;

 padding: 10px;

 background: #f1f1f1;

}

/* Header/Blog Title */

.header {

 padding: 30px;

 text-align: center;

 background: white;
```

```css
}
.header h1 {
 font-size: 50px;
}
/* Style the top navigation bar */
.topnav {
 overflow: hidden;
 background-color: #333;
}
/* Style the topnav links */
.topnav a {
 float: left;
 display: block;
 color: #f2f2f2;
 text-align: center;
 padding: 14px 16px;
 text-decoration: none;
}
/* Change color on hover */
.topnav a:hover {
 background-color: #ddd;
 color: black;
}
/* Create two unequal columns that floats next to each other */
/* Left column */
.leftcolumn {
 float: left;
 width: 75%;
}
/* Right column */
.rightcolumn {
```

```css
 float: left;

 width: 25%;

 background-color: #f1f1f1;

 padding-left: 20px;

}
/* Fake image */

.fakeimg {

 background-color: #aaa;

 width: 100%;

 padding: 20px;

}
/* Add a card effect for articles */

.card {

 background-color: white;

 padding: 20px;

 margin-top: 20px;

}
/* Clear floats after the columns */

.row:after {

 content: "";

 display: table;

 clear: both;

}
/* Footer */

.footer {

 padding: 20px;

 text-align: center;

 background: #ddd;

 margin-top: 20px;

}
/* Responsive layout - when the screen is less than 800px wide, make the two columns stack on top of
```

```
    each other instead of next to each other */
    @media screen and (max-width: 800px) {
     .leftcolumn, .rightcolumn {
     width: 100%;
     padding: 0;
     }
    }
    /* Responsive layout - when the screen is less than 400px wide, make the navigation links stack on top
    of each other instead of next to each other */
    @media screen and (max-width: 400px) {
     .topnav a {
     float: none;
     width: 100%;
     }
    }
    </style>
    </head>
    <body>
    <div class="header">
     <h1>My Website</h1>
     <p>Resize the browser window to see the effect.</p>
    </div>
    <div class="topnav">
     <a href="#">Link</a>
     <a href="#">Link</a>
     <a href="#">Link</a>
     <a href="#" style="float:right">Link</a>
    </div>
    <div class="row">
     <div class="leftcolumn">
     <div class="card">
```

```html
<h2>TITLE HEADING</h2>
<h5>Title description, Dec 7, 2017</h5>
<div class="fakeimg" style="height:200px;">Image</div>
<p>Some text..</p>
<p>Sunt in culpa qui officia deserunt mollit anim id est laborum consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco.</p>
</div>
<div class="card">
<h2>TITLE HEADING</h2>
<h5>Title description, Sep 2, 2017</h5>
<div class="fakeimg" style="height:200px;">Image</div>
<p>Some text..</p>
<p>Sunt in culpa qui officia deserunt mollit anim id est laborum consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco.</p>
</div>
</div>
<div class="rightcolumn">
<div class="card">
<h2>About Me</h2>
<div class="fakeimg" style="height:100px;">Image</div>
<p>Some text about me in culpa qui officia deserunt mollit anim..</p>
</div>
<div class="card">
<h3>Popular Post</h3>
<div class="fakeimg"><p>Image</p></div>
<div class="fakeimg"><p>Image</p></div>
<div class="fakeimg"><p>Image</p></div>
</div>
<div class="card">
```

```
 <h3>Follow Me</h3>

 <p>Some text..</p>

 </div>

 </div>

</div>

<div class="footer">

 <h2>Footer</h2>

</div>

</body>

</html>
```

5. **Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.**

```
<!DOCTYPE

HTML> <html>

<head>

<style>

table, td, th

{

border: 1px solid black;

width: 33%;

text-align: center;

background-color: DarkGray;

border-collapse:collapse;

}
```

```
table { margin: auto; }

input { text-align:right; }

</style>

<script type="text/javascript">

function calc(clicked_id)

{

Var val1 =

parseFloat(document.getElementById("value1").value);
```

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```
var val2 =

parseFloat(document.getElementById("value2").value);

if(isNaN(val1)||isNaN(val2))

alert("ENTER VALID NUMBER");

else if(clicked_id=="add")

document.getElementById("answer").value=val1+val

2;

else if(clicked_id=="sub")

document.getElementById("answer").value=val1-

val2;

else if(clicked_id=="mul")

document.getElementById("answer").value=val1*val2;
```

```
else if(clicked_id=="div")

document.getElementById("answer").value=val1/val2;

}

function cls()

{

value1.value="0";

value2.value="0";

answer.value="";

}

</script>

</head>

<body>

<table>

<tr><th colspan="4"> SIMPLE CALCULATOR </th></tr>

<tr><td>value1</td><td><input type="text" id="value1"

value="0"/></td> <td>value2</td><td><input type="text" id="value2"

value="0"/> </td></tr> <tr><td><input type="button" value="Addition"

id = "add" onclick="calc(this.id)"/></td>

<td><input type="button" value="Subtraction" id = "sub"

onclick="calc(this.id)"/></td>

<td><input type="button" value="Multiplication" id = "mul"
```

```
onclick="calc(this.id)"/></td>

<td><input type="button" value="Division" id ="div"

onclick="calc(this.id)"/></td></tr>

<tr><td>Answer:</td><td> <input type="text" id="answer" value=""

disabled/></td>

<td colspan="2"><input type="button" value="CLEAR ALL"

onclick="cls()"/></td> </tr>

</table>

</body>

</html>
```

6. Design signup form to validate username, password, and phone numbers etc. using Java script

```
<body>
            <h1 style="text-align: center;">REGISTRATION FORM</h1>
            <form name="RegForm" onsubmit="return PROGRAM6FUNC()" method="post">

<p>Name: <input type="text"
                                        size="65" name="Name" /></p>


            <br />


<p>Address: <input type="text"
                                        size="65" name="Address" />
            </p>
```

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```html
                              <br />


<p>E-mail Address: <input type="text"

                                        size="65" name="EMail" /></p>


                <br />


<p>Password: <input type="text"

                                size="65" name="Password" /></p>


                <br />


<p>Telephone: <input type="text"

                                size="65" name="Telephone" /></p>


                <br />



<p>

                        SELECT YOUR COURSE
                        <select type="text" value="" name="Subject">
                                <option>BTECH</option>
                                <option>BBA</option>
                                <option>BCA</option>
                                <option>B.COM</option>
                                <option>BE</option>
                        </select>
                </p>


                <br />
```

```html
                                    <br />

<p>Comments: <textarea cols="55"

                                                name="Comment"> </textarea></p>



<p>

                            <input type="submit"

                                    value="send" name="Submit" />

                            <input type="reset"

                                    value="Reset" name="Reset" />

                    </p>



            </form>

    </body>
```

JAVASCRIPT FILE:

```javascript
<script>

                    function PROGRAM6FUNC() {

                            var name =

                                    document.forms.RegForm.Name.value;

                            var email =

                                    document.forms.RegForm.EMail.value;

                            var phone =

                                    document.forms.RegForm.Telephone.value;

                            var what =

                                    document.forms.RegForm.Subject.value;

                            var password =

                                    document.forms.RegForm.Password.value;

                            var address =
```

```
                                    document.forms.RegForm.Address.value;

                        var regEmail=/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/g;
//Javascript reGex for Email Validation.

                        var regPhone=/^\d{10}$/;
            // Javascript reGex for Phone Number validation.

                        var regName = /\d+$/g;
        // Javascript reGex for Name validation


                        if (name == "" || regName.test(name)) {

                                window.alert("Please enter your name properly.");

                                name.focus();

                                return false;

                        }


                        if (address == "") {

                                window.alert("Please enter your address.");

                                address.focus();

                                return false;

                        }


                        if (email == "" || !regEmail.test(email)) {

                                window.alert("Please enter a valid e-mail address.");

                                email.focus();

                                return false;

                        }


                        if (password == "") {

                                alert("Please enter your password");

                                password.focus();

                                return false;

                        }
```

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```javascript
                                 if(password.length <6){
                                         alert("Password should be atleast 6 character long");
                                         password.focus();
                                         return false;


                                 }
                                 if (phone == "" || !regPhone.test(phone)) {
                                         alert("Please enter valid phone number.");
                                         phone.focus();
                                         return false;
                                 }


                                 if (what.selectedIndex == -1) {
                                         alert("Please enter your course.");
                                         what.focus();
                                         return false;
                                 }


                                 return true;
                         }
                 </script>
```

CSS File (External):

```css
<style>
        div {
                box-sizing: border-box;
                width: 100%;
                border: 100px solid black;
                float: left;
```

```
                    align-content: center;

                    align-items: center;

            }


            form {

                    margin: 0 auto;

                    width: 600px;

            }
    </style>
```

7. **Create a HTML page with JS to display a new image and text when mouse comes over the existing content in the page**

```html
<html>
<head>
<script>
function bigImg(x)
{
x.style.height="480px";
x.style.width="480px";
}
function normalImg(x)
{
x.style.height="240px";
x.style.width="240px";
}
</script>
</head>
<body>
<img onmouseover="bigImg(this)" onmouseout="normalImg(this)" border="0" src="Penguins.jpg"
alt="Smiley" width="120" height="120" />
<p>The function bigImg() is triggered when the user moves the mouse pointer over the image. This
```

function enlarges the image.</p>

<p>The function normalImg() is triggered when the mouse pointer is moved out of the image. That function changes the height and width of the image back to normal.</p>

 </body>

</html>

8. **Write an HTML page including any required JavaScript that takes a number from text field in the range of 0 to 999 and shows it in words. It should not accept four and above digits, alphabets and special characters.**

```
<html>
<head>
<title>HTML - Convert numbers to words using JavaScript</title>
<SCRIPT language=Javascript>
<!--
function isNumberKey(evt)
{
var charCode = (evt.which) ? evt.which : evt.keyCode;
if (charCode != 46 && charCode > 31
&& (charCode < 48 || charCode > 57))
return false;
return true;
}
//-->
</SCRIPT>
<script>
function NumToWord(inputNumber, outputControl)
{
var str = new String(inputNumber)
var splt = str.split("");
var rev = splt.reverse();
```

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```javascript
var once = ['Zero', ' One', ' Two', ' Three', ' Four', ' Five', ' Six', ' Seven', ' Eight', ' Nine'];

var twos = ['Ten', ' Eleven', ' Twelve', ' Thirteen', ' Fourteen', ' Fifteen', ' Sixteen', ' Seventeen', ' Eighteen', ' Nineteen'];

var tens = ['', 'Ten', ' Twenty', ' Thirty', ' Forty', ' Fifty', ' Sixty', ' Seventy', ' Eighty', ' Ninety'];

numLength = rev.length;

var word = new Array();

var j = 0;

for (i = 0; i < numLength; i++) {

switch (i) {

case 0:

if ((rev[i] == 0) || (rev[i + 1] == 1)) {

word[j] = '';

}

else {

word[j] = once[rev[i]];

}

word[j] = word[j];

break;

case 1:

aboveTens();

break;

case 2:

if (rev[i] == 0) {

word[j] = '';

}

else if ((rev[i - 1] == 0) || (rev[i - 2] == 0)) {

word[j] = once[rev[i]] + " Hundred ";

}

else {

word[j] = once[rev[i]] + " Hundred and";
```

```
}
break;
default: break;
}
j++;
}
function aboveTens() {
if (rev[i] == 0) { word[j] = ''; }
else if (rev[i] == 1) { word[j] = twos[rev[i - 1]]; }
else { word[j] = tens[rev[i]]; }
}
word.reverse();
var finalOutput = '';
for (i = 0; i < numLength; i++) {
finalOutput = finalOutput + word[i];
}
document.getElementById(outputControl).innerHTML = finalOutput;
}
</script>
</head>
<body>
<h1>HTML - Convert numbers to words using JavaScript</h1>
<input id="Text1" type="text" onkeypress="return isNumberKey(event)"
onkeyup="NumToWord(this.value,'divDisplayWords');" maxlength="3" style="backgroundcolor:
#efefef; border: 2px solid #CCCCCC; font-size: large" />
<br /> <br />
<div id="divDisplayWords" style="font-size: 30; color: Teal; font-family: Arial;">
</div>
</body>
</html>
```