

# **National Institute Of Technology Raipur**

## **INTERNET & WEB TECHNOLOGIES LAB RECORD**

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## 1. Create a HTML static web page which shows the use of different tags

```
<!DOCTYPE html>
<html>

<head>
  <title>IWT lab works</title>
  <style>
    #nextpage {
      border: 2px solid black;
      background-color: orange;
      padding: 10px;
      height: 20px;
      width: 80px;
      font-weight: bold;
    }
  </style>
</head>

<body style="background-color:lightblue; padding: 30px">
  <h1>Internet and Web Technologies</h1>
  <h2 style="color:sandybrown">Here we will be discussing
technologies used in webpages.</h2>
  <!-- Below is a paragraph. This is a comment. -->
  <p style="font-size: 19px; color:grey; font-family: cursive">We
shall see different tags used in an HTML document.</p>
  <div>
    <em>
      <b>This is block 1.</b>
    </em>
    <p>There are <span style="color:rgb(153, 66, 51)">6</span>
      headings available in html, h1 through h6</p>
  </div>
  <div>
    <b>
      <em>This is block 2</em>
    </b>
    <p>I am writing a paragraph with p tag.</p>
  </div>
  <div>
    <p> To add a clickable image, put that img tag nested under an
anchor tag</p>
    <p> But then the entire image will point to one link.</p>
    <p>In order to make different areas of image point of
```

```
different links, we use a <span style="color:crimson;
font-size:2em">map</span>(image-map)</p>
</div>
<div style="float:right">
  <a id="nextpage" href="index2.html">Next Page</a>
</div>
</body>

</html>
```

## Internet and Web Technologies

Here we will be discussing technologies used in webpages.

We shall see different tags used in an HTML document.

***This is block 1.***

There are 6 headings available in html, h1 through h6

***This is block 2***

I am writing a paragraph with p tag.

To add a clickable image, put that img tag nested under an anchor tag

But then the entire image will point to one link.

In order to make different areas of image point of different links, we use a **map**(image-map)

## 2. Create a HTML page using TABLE tag.

```
<!DOCTYPE html>
<html>

<head>
  <title>IWT lab works</title>
  <style>
    #nextpage {
      border: 2px solid black;
      background-color: orange;
      padding: 10px;
      height: 20px;
      width: 80px;
      font-weight: bold;
    }
  </style>
</head>
<body>
<table style="border:5px solid black; padding: 10px; float: right;"
border="1">
  <tr>
    <th>Name</th>
    <th>Country</th>
  </tr>
  <tr>
    <td>Christ the Redeemer</td>
    <td>Rio de Janeiro, Brazil</td>
  </tr>
  <tr>
    <td>Great Wall of China</td>
    <td>China</td>
  </tr>
  <tr>
    <td>Machu Picchu</td>
    <td>Cuzco Region, Peru</td>
  </tr>
  <tr>
    <td>Petra</td>
    <td>Jordan</td>
  </tr>
  <tr>
    <td>The Colosseum</td>
    <td>Rome, Italy</td>
```

```

    </tr>
    <tr>
        <td>Taj Mahal</td>
        <td>Agra, Uttar Pradesh, India</td>
    </tr>

    <tr>
        <td>Chichen Itza</td>
        <td>Rio de Janeiro, Brazil</td>
    </tr>
</table>
</body>
</html>

```

Name	Country
Christ the Redeemer	Rio de Janeiro, Brazil
Great Wall of China	China
Machu Picchu	Cuzco Region, Peru
Petra	Jordan
The Colosseum	Rome, Italy
Taj Mahal	Agra, Uttar Pradesh, India
Chichen Itza	Rio de Janeiro, Brazil

### 3. Create a framed HTML page using FRAMESET tag

```
<!DOCTYPE html>
<html>

<frameset cols="25%,*,25%">
  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">
</frameset>

</html>
```

#### Frame A

**Note:** The frameset, frame, and noframes elements are not supported in HTML5.

#### Frame B

#### Frame C

#### 4. Create a webpage with the following using HTML

a. To embed an image in web page.

b. To fix the hot spots.

c. Show all the related information when a hotspot is clicked in the map.

```
<!DOCTYPE html>
<html>
<head>
  <title>IWT lab works</title>
</head>
<body style="background-color:lightblue; padding: 30px">
<h1>Internet and Web Technologies</h1>
  <h2 style="color:sandybrown">Here we will be discussing
technologies used in webpages.</h2>
  <!-- Below is a paragraph. This is a comment. -->
  <p style="font-size: 19px; color:grey; font-family: cursive">We
shall see different tags used in an HTML document.</p>
  <div>
    <em>
      <b>This is block 1.</b>
    </em>
    <p>There are <span style="color:rgb(153, 66, 51)">6</span>
      headings available in html, h1 through h6</p>
  </div>
  <div>
    <b>
      <em>This is block 2</em>
    </b>
    <p>I am writing a paragraph with p tag.</p>
  </div>
  <div>
    <p> To add a clickable image, put that img tag nested under an
anchor tag</p>
    <p> But then the entire image will point to one link.</p>
    <p>In order to make different areas of image point of
different links, we use a <span style="color:crimson;
font-size:2em">map</span>(image-map)</p>
    
    <map name="myMap" id="Map">
      <area alt="" title=""
href="https://en.wikipedia.org/wiki/Christ_the_Redeemer_(statue)"
shape="poly" coords="8,13,12,112,162,113,157,14" />
```

```
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/Great_Wall_of_China" shape="poly"
coords="203,12,205,114,437,106,433,14" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/Machu_Picchu" shape="poly"
coords="465,8,465,105,695,104,687,19" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/Petra" shape="poly"
coords="11,138,12,236,168,239,156,139" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/The_Colosseum" shape="poly"
coords="469,137,468,234,689,232,686,136" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/Taj_Mahal" shape="poly"
coords="15,256,20,372,332,385,315,272" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/Chichen_Itza" shape="poly"
coords="357,264,364,382,682,383,686,268" />
        <area alt="" title=""
href="https://en.wikipedia.org/wiki/New7Wonders_of_the_World"
shape="poly" coords="191,129,182,229,436,237,447,130" />
    </map>
</body>
</html>
```



# Internet and Web Technologies

Here we will be discussing technologies used in webpages.

We shall see different tags used in an HTML document.

***This is block 1.***

There are 6 headings available in html, h1 through h6

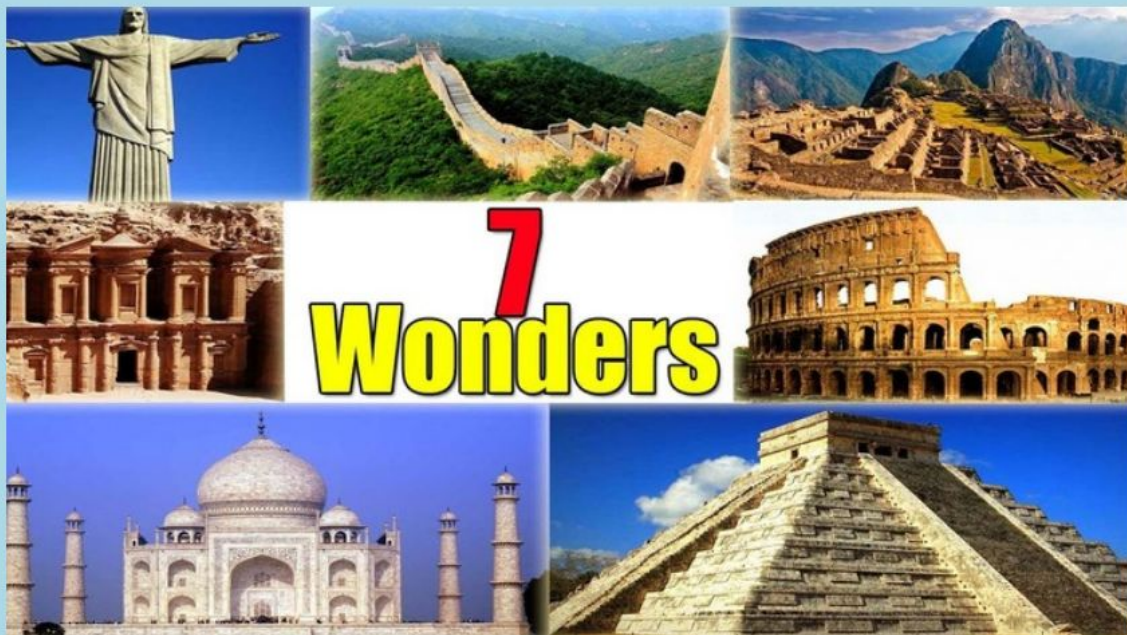
***This is block 2***

I am writing a paragraph with p tag.

To add a clickable image, put that img tag nested under an anchor tag

But then the entire image will point to one link.

In order to make different areas of image point of different links, we use a **map**(image-map)



When we click on the specific areas (like the individual “wonders”), we are taken to its corresponding wiki-page.

Example, on clicking Christ The Redeemer, we get this ->



[Main page](#)  
[Contents](#)  
[Featured content](#)  
[Current events](#)  
[Random article](#)  
[Donate to Wikipedia](#)  
[Wikipedia store](#)

[Interaction](#)  
[Help](#)

Article [Talk](#)

[Read](#)

## Christ the Redeemer (statue)

From Wikipedia, the free encyclopedia

*For other statues with this name and for other uses, see [Christ the Redeemer](#).*

**Christ the Redeemer** (Portuguese: *Cristo Redentor*, standard Brazilian Portuguese: [ˈkʁistu ʁɛdɐ̃ˈtoɾ] pronunciation: [ˈkʁiʃtũ ʁɛdɛ̃ˈtoɦ]) is an [Art Deco](#) statue of [Jesus Christ](#) in [Rio de Janeiro, Brazil](#) [Landowski](#) and built by Brazilian engineer [Heitor da Silva Costa](#), in collaboration with French and Romanian sculptor [Gheorghe Leonida](#) fashioned the face. Constructed between 1922 and 1931, it is 30 metres (98 ft) high, excluding its 8-metre (26 ft) [pedestal](#). The arms stretch 28 metres (92 ft) wide.<sup>[1]</sup>

The statue weighs 635 [metric tons](#) (625 [long](#), 700 [short tons](#)), and is located at the peak of the [Corcovado](#) mountain in the [Tijuca Forest](#) National Park overlooking the city of Rio de Janeiro.

Example, on clicking in the middle of the image, we get this ->



[Main page](#)  
[Contents](#)  
[Featured content](#)  
[Current events](#)  
[Random article](#)  
[Donate to Wikipedia](#)  
[Wikipedia store](#)

[Interaction](#)  
[Help](#)

Article [Talk](#)

[Read](#)

## New7Wonders of the World

From Wikipedia, the free encyclopedia

*This article is about the New7Wonders Foundation list. For other uses, see [Wonders of the World](#).*

**New7Wonders of the World** (2000–2007) was a campaign started in 2000 to choose [Wonders of the World](#) selection of 200 existing monuments.<sup>[1]</sup> The popularity poll was led by Canadian-Swiss Bernard W. The New7Wonders Foundation based in Zurich, Switzerland, with winners announced on 7 July 2007.

The New7Wonders Foundation said that more than 100 million votes were cast through the Internet via the Internet was limited to one vote for seven monuments per person/identity, but multiple votes via telephone.<sup>[4]</sup> Hence the poll was considered unscientific.<sup>[5]</sup> According to [John Zogby](#), founder and the Utica, New York-based polling organization [Zogby International](#), New7Wonders Foundation dropped

## 5. Create the registration form using HTML and create the CSS file and implement the CSS with HTML.

### HTML -

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>sample login form</title>
  <link rel="stylesheet" href="index3_variant2_css.css">
</link>
</head>

<body>
  <div style="height:200px;">
    <!-- empty to make form in the near mid of page -->
  </div>
  <div id="form_outer_div" style="text-align: center">
    <div id="form_div">
      <form id="myform" method="POST" action="" target="_blank">
        <span style="font-size:1.5em">Name</span><br>

        <input class="input_fields" id="username_field"
type="text" placeholder="enter name" name="username"
onfocus="this.value=''"><br>

        <span style="font-size:1.5em">Mobile Number</span><br>

        <input class="input_fields" id="mobile_field"
type="text" name="mobile_number"
placeholder="mobile number"
onfocus="this.value=''"><br>

        <span style="font-size:1.5em">Email</span><br>

        <input class="input_fields" id="email_field"
type="text" name="email_address"
placeholder="email"
onfocus="this.value=''"><br><br>
```

```

                <input class="input_fields" id="submit_field"
type="submit" value="Register">
            </form>
        </div>
    </div>

</body>

</html>

```

## CSS -

```

body{
    /* background-color: #333140; */
    background-color: rgb(233, 233, 233);
}

#form_outer_div{
    width: 500px;
    height: 300px;
    background-image: url('flower1.jpg');
    background-size: 500px 300px;
    background-repeat: no-repeat;
    background-color: rgb(159, 101, 161);
    margin: 0 auto;
    border: 5px solid #333140;
    border-radius: 60px;
    box-shadow: 25px 15px 7px 6px #888888;
}

#form_div{
    background-color: rgba(62, 53, 63, 0.685);
    border-radius: 52px;
    width:500px;
    height: 300px;
    margin: 0 0 0 auto;
}

form{
    padding: 55px 10px;
}

#myform span{

```

```
        color: white;
    }
    .input_fields{
        height: 35px;
        border: 3px solid white;
        border-radius: 20px;
        text-align: center;
        font-size: 1.3em;
        background-color: rgba(128, 128, 128, 0.605);
        color: white;
    }
    .input_fields:hover{
        background-color: rgb(255, 255, 255);
        color: black;
    }
    #submit_field{
        height: 35px;
        background-color: rgba(128, 0, 128, 0.605);
        width: 150px;
        color: white;
    }
    #submit_field:hover{
        background-color: rgb(224, 2, 224);
        cursor: pointer;
        border: 3px solid rgb(224, 2, 224);
    }
}
```



Name

Prabal Dev

Mobile Number

7225001236

Email

dev9798@gmail.com

Register



**6. Design a webpage using CSS which includes the following:**

- a. Use different font styles.**
- b. Set background image for both the page and single elements on page.**
- c. Control the repetition of image with background-repeat property.**
- d. Define style for links as a:link, a:active, a:hover, a:visited.**
- e. Add customized cursors for links.**
- f. Work with layers.**

**HTML -**

```
<!DOCTYPE html>
<html>

<head>
  <title>Experiment 2</title>
  <link rel="stylesheet" href="index2-style.css" />
</head>

<body>
  <h3>Hover upon different items to see the cursor change.</h3>
  <!-- vmax is max width of browser window (aka viewport), other
options are vh, vw, vmin -->
  <!-- calc is to do simple math in CSS -->
  <div class="cursor-block">
    <ul class="cursors-list"><span style="color:aquamarine">some
Cursors -</span>
      <li style="cursor: auto;"> This is <span>auto</span>- set
by browser</li>
      <li style="cursor: crosshair"> This is
<span>crosshair</span></li>
      <li style="cursor: pointer;"> This is
<span>pointer</span></li>
      <li style="cursor: text"> This is <span>text</span></li>
      <li style="cursor: wait"> This is <span>wait</span></li>
      <li style="cursor: help"> This is <span>help</span></li>
      <li style="cursor: move"> This is <span>move</span></li>
      <li style="cursor: ne-resize"> This is (North East)
<span>ne-resize</span></li>
      <li style="cursor: default"> This is <span>default</span>
cursor</li>
      <li style="cursor: s-resize"> This is (South)
<span>s-resize</span></li>
    </ul>
  </div>
  <h3>See how the links change</h3>
```

```

<div class="links-effect-block">
  <ul class="links-list">See what happens after you hover,
visit, click the links below<br />
    <li><a
href="http://www.google.com">Google.com</a></li><br>
    <li><a href="http://nitrr.ac.in">NITRR
website</a></li><br>
    <li><a href="http://www.amazon.in">Amazon buy</a></li><br>
    <li><a href="http://libgen.io">eBooks website</a></li>
  </ul>
</div>
<h3>Dan Brown's book featuring Langdon in a Layered CSS style
(z-index)</h3>
<h3 style="font-size: 14px; color:silver">I have also added a
come-to-top effect when mouse is hovered using <span
style="color:red">@keyframes</span></h3>
<div class="img-stack">
  
  
  
  
  
</div>
</body>

</html>

```

## CSS -

```

body{
  /* Responsive Background Image */

  background-image: url("back-image2.jpg");
  /* Background image is centered vertically and horizontally at all
times */
  background-position: center center;
  /* Background image doesn't tile */
  background-repeat: no-repeat;
  /* Background image is fixed in the viewport so that it doesn't
move when
the content's height is greater than the image's height */
  background-attachment: fixed;
  /* This is what makes the background image rescale based
on the container's size */

```



```

    background-size: cover;
    /* Set a background color that will be displayed
       while the background image is loading */
    background-color: #464646;
}
h3{
    color:white;
    text-align: center;
    font-size: 1.2em;
}
.cursor-block{
    left:calc(50vmax - 25vmax);
    width:50vmax;
    position:relative;
    background-color: cornflowerblue;
}
.cursors-list{
    font-family: Georgia;
    font-size: 1.4em;
    text-align: justify;
    color:darkmagenta;
}
.cursors-list li span{
    color:black;
}
.links-effect-block{
    position: relative;
    left: 25vmax;
    width: 50vmax;
    height: 500px;
    background-image: url("link-back-image.jpg");
    /* repeat in both x and y */
    background-repeat: repeat;
}
.links-list{
    font-size: 2em;
    font-family: cursive;
    text-align: left;
}
.links-list li{
    display: inline-block;
    /* padding values - top right bottom left */
    /* padding values- (top,bottom) (right,left) if only two values

```

```

given */
padding: 10px 20px;
border: 1px solid black;
background-color: aquamarine;
}
/* When setting the style for several link states, there are some
order rules:

a:hover MUST come after a:link and a:visited
a:active MUST come after a:hover
*/
.links-list a:link{
color:grey;
text-decoration: none;
}
.links-list a:visited{
color: darkorchid;
}
.links-list a:hover{
text-decoration: underline;
color: black;
background-color: yellow;
}
.links-list a:active{
color:hotpink;
background-color: lightgrey;
}
div.img-stack {
position: relative;
top: 0px;
left: 0px;
}
.img-stack img{
border: 3px solid white;
padding: 5px;
}
.img-stack img:hover{
/* animation-name: cometotop;
animation-duration: 2s;
animation-iteration-count: infinite; */
/* the above is same as below (shorthand) */
animation: cometotop 5s infinite;
}

```

```

img#book1{
  position: absolute;
  left: 500px;
  top: 400px;
  z-index: 5;
}
img#book2{
  position: absolute;
  left: 400px;
  top: 300px;
  z-index: 4;
}
img#book3{
  position: absolute;
  left: 300px;
  top: 200px;
  z-index: 3;
}
img#book4{
  position: absolute;
  left: 200px;
  top: 100px;
  z-index: 2;
}
img#book5{
  position: relative;
  left: 100px;
  top: 0px;
  z-index: 1;
}

@keyframes cometotop{
  /* i don't know how to use default value for 0% */
  /* But Leaving it empty works, though not in a good way */
  0% {}
  25% {z-index: 6;}
  100% {z-index: 6;}
  /* i think it divides the animation-duration in equal parts for each
  % so
  i gave 25% also because i don't want 0% to continue for half of
  animation-duration that i specified. */
}

```

Hover upon different items to see the cursor change.

some Cursors -

- This is auto- set by browser
- This is crosshair
- This is pointer
- This is text
- This is wait
- This is help
- This is move
- This is (North East) ne-resize
- This is default cursor
- This is (South) s-resize

See how the links change

See what happens after you hover, visit, click  
the links below

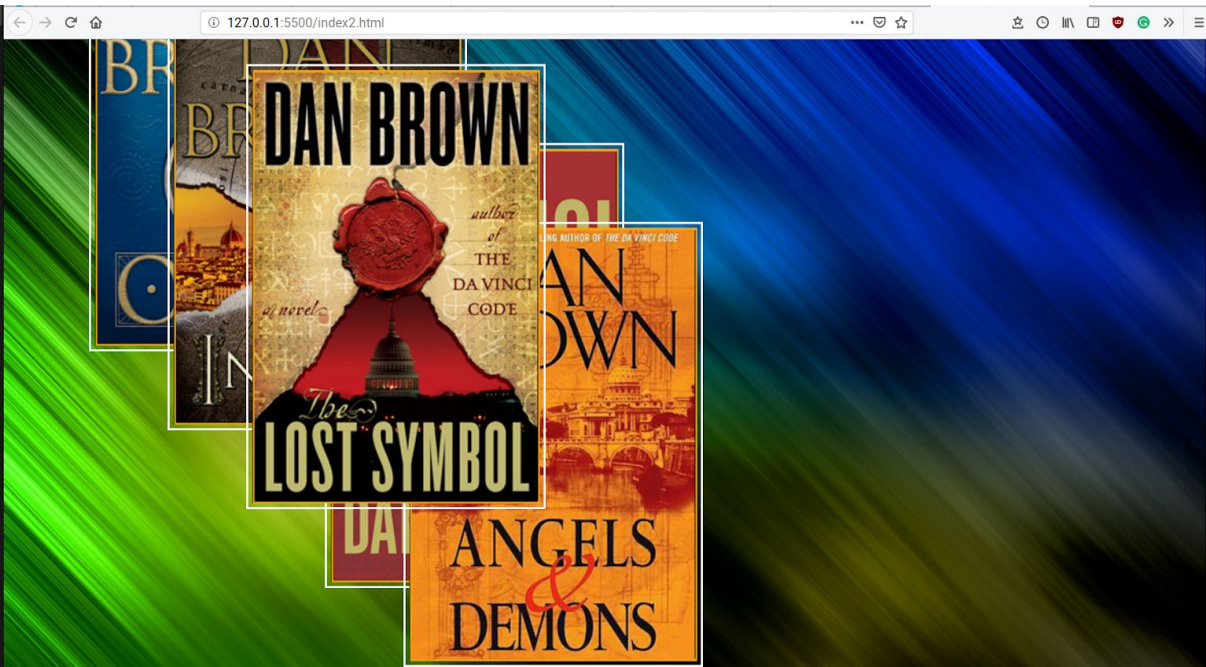
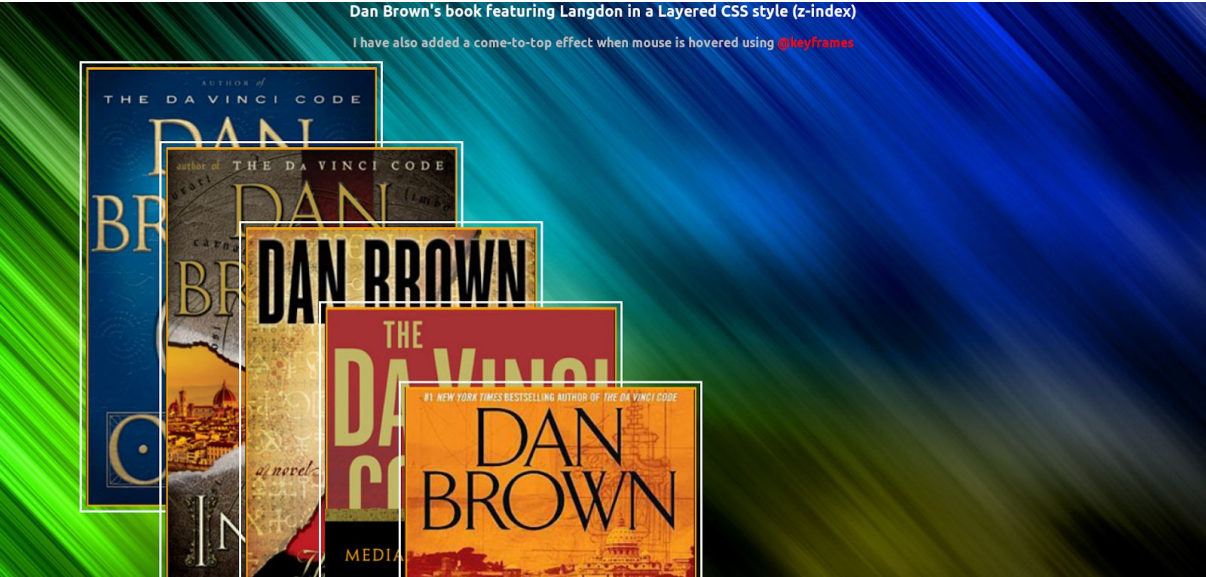
Google.com

NITRR website

Amazon buy

eBooks website







## 7. Write a program to show blinking effect on web page using javascript.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Blinking LED effect</title>
</head>

<body>
  <div style="text-align:center">
    <div id ="color_box" style="height: 200px; width:200px;
margin:0 auto; background-color: black">
    </div>
    <p></p>
    <button id = "button_switch" type="button"
onclick="light_dark()" style="width:180px; height:50px;">SWITCH LED
ON</button>
  </div>
  <p></p>
  <div style="text-align:center">
    <div id="blink_box" style="height: 200px; width:200px;
margin:0 auto; background-color: black">
      <script>
        blink();
        function blink() {
          setInterval(changecolor, 300);
        }
        function changecolor() {
          if
(document.getElementById('blink_box').style.backgroundColor ==
'black') {

document.getElementById('blink_box').style.backgroundColor = "red";
          }
          else {

document.getElementById('blink_box').style.backgroundColor = "black";
          }
        }
      </script>
    </div>
  </div>

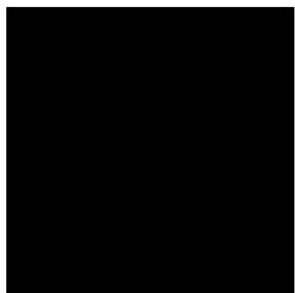
```

```

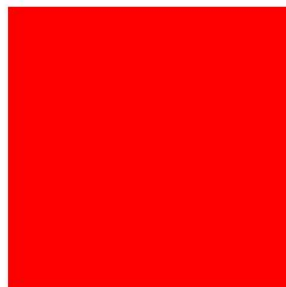
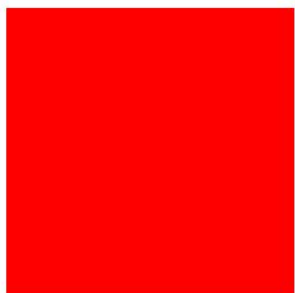
        </script>
    </div>
</div>

</body>
<script type="text/javascript">
    var status = 'light';
    function light_dark(){
        if(status == 'light'){
            document.getElementById('color_box').style.backgroundColor
= "red";
            document.getElementById('button_switch').innerHTML =
"SWITCH LED OFF";
            status = 'dark';
        }
        else{
            document.getElementById('color_box').style.backgroundColor
= "black";
            document.getElementById('button_switch').innerHTML =
"SWITCH LED ON";
            status = 'light';
        }
    }
</script>
</html>

```



SWITCH LED ON



SWITCH LED OFF



## 8. Design a digital clock on your webpage using javascript.

```
<!DOCTYPE html>
<html>
<head>
<script>
function startTime() {
    var today = new Date();
    var h = today.getHours();
    var m = today.getMinutes();
    var s = today.getSeconds();
    m = checkTime(m);
    s = checkTime(s);
    document.getElementById('txt').innerHTML =
    h + ":" + m + ":" + s;
    var t = setTimeout(startTime, 500);
}
function checkTime(i) {
    if (i < 10) {i = "0" + i}; // add zero in front of numbers < 10
    return i;
}
</script>
</head>

<body onload="startTime()">

<div id="txt"></div>

</body>
</html>
```

18:12:18

18:12:35



9. Write a java script to validate the following fields in a registration page.
- a. Name (should contains alphabets and the length should not be less than 6 characters)
  - b. Password(should not be less than 6 characters)
  - c. E-mail(should not contain invalid addresses)

HTML -

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

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>sample login form</title>
    <link rel="stylesheet" href="reg.css">
    </link>
    <script type="text/javascript" src="valid.js"></script>
</head>

<body>
    <div style="height:200px;">
        <!-- empty to make form in the near mid of page -->
    </div>
    <div id="form_outer_div" style="text-align: center">
        <div id="form_div">
            <form id="myform" method="POST" action="" target="_blank">
                <span style="font-size:1.5em">Username</span><br>

                <input class="input_fields" id="username_field"
type="text" placeholder="enter username" name="username"
                onfocus="check_value_present(this);"
onblur="name_validation(this.value)"><br>
                <span style="font-size:1.5em">Email</span><br>

                <input class="input_fields" id="email_field" type="text"
placeholder="enter email" name="email"
                onfocus="check_value_present(this);"
onblur="email_validation(this.value)"><br>

                <span style="font-size:1.5em">Password</span><br>

                <input class="input_fields" id="password_field"
type="password" name="password" placeholder="enter password">
```

```

        onfocus="check_value_present(this);"
onblur="password_validation(this.value)"><br><br>

        <input class="input_fields" id="submit_field"
type="submit" value="Login">
    </form>
</div>
</div>

</body>

</html>

```

## CSS -

```

body{
    /* background-color: #333140; */
    background-color: rgb(233, 233, 233);
}

#form_outer_div{
    width: 500px;
    height: 300px;
    background-image: url('flower1.jpg');
    background-size: 500px 300px;
    background-repeat: no-repeat;
    background-color: rgb(159, 101, 161);
    margin: 0 auto;
    border: 5px solid #333140;
    border-radius: 60px;
    box-shadow: 25px 15px 7px 6px #888888;
}

#form_div{
    background-color: rgba(62, 53, 63, 0.685);
    border-radius: 52px;
    width: 500px;
    height: 300px;
    margin: 0 0 0 auto;
}

form{
    padding: 55px 10px;
}

```

```

#myform span{
    color: white;
}
.input_fields{
    height: 35px;
    border: 3px solid white;
    border-radius: 20px;
    text-align: center;
    font-size: 1.3em;
    background-color: rgba(128, 128, 128, 0.605);
    color: white;
}
.input_fields:hover{
    background-color: rgb(255, 255, 255);
    color: black;
}
#submit_field{
    height: 35px;
    background-color: rgba(128, 0, 128, 0.605);
    width: 150px;
    color: white;
}
#submit_field:hover{
    background-color: rgb(224, 2, 224);
    cursor: pointer;
    border: 3px solid rgb(224, 2, 224);
}

```

JS -

```

function check_value_present(a_element){
    //console.log(a_element);
    if((a_element.value=='enter only 6+
    alphabets')||(a_element.value=='email not
    valid')||(a_element.value=='enter at least 6 chars')){
        document.getElementById(a_element.id).value="";
        //we cannot write a_value = "" ; it's like a_value is local
        to this function and will not write on the document
    }
    a_element.removeAttribute("style");
    //console.log(a_element);
    if(a_element.id == "password_field"){
        a_element.setAttribute("type", "password");
    }
}

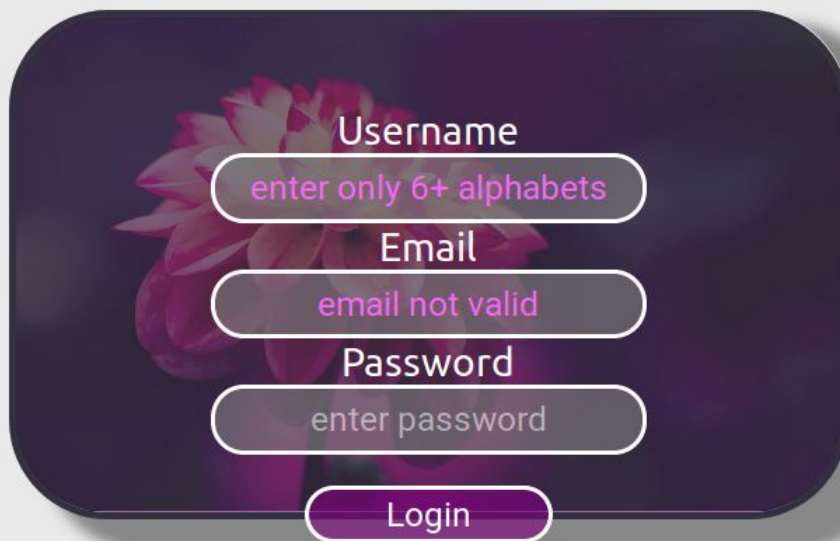
```

```

}
function name_validation(a_value){
    var regex_name = /^[A-Za-z]{6,}$/;
    //console.log(a_value);
    if(a_value.match(regex_name)){
        //console.log(a_value.match(regex_name));
        return true;
    }
    else{
        var username_field_element =
document.getElementById('username_field');
        username_field_element.setAttribute("style", "color:
#ff66ff;");
        document.getElementById('username_field').value="enter only
6+ alphabets";
        //console.log(a_value.match(regex_name));
        return false;
    }
}
function email_validation(a_value){
    var regex_email = /[A-Za-z0-9]+@[a-z]+\.[a-z]+/;
    if(a_value.match(regex_email)){
        return true;
    }
    else{
        var email_field_element =
document.getElementById('email_field');
        email_field_element.setAttribute("style", "color:
#ff66ff;");
        document.getElementById('email_field').value="email not
valid";
        return false;
    }
}
function password_validation(a_value){
    var regex_password = /.{6,}/;
    if(a_value.match(regex_password)){
        return true;
    }
    else{
        var password_field_element =
document.getElementById('password_field');
        password_field_element.setAttribute("style", "color:
#ff66ff;");
        password_field_element.setAttribute("type", "text");

```

```
document.getElementById('password_field').value="enter at  
least 6 chars";  
  
return false;  
}  
}
```



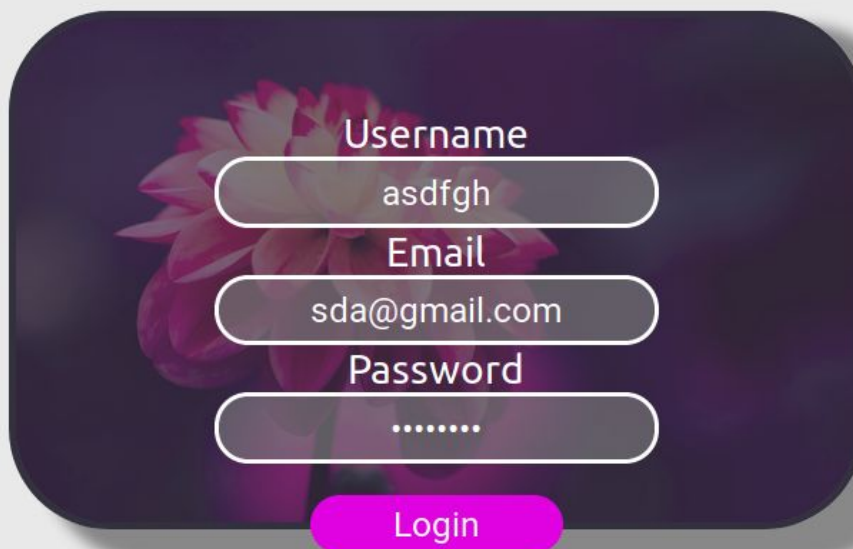
A login form with a dark purple background and a pink flower illustration. The form contains four input fields and a Login button. The Username field has a validation message "enter only 6+ alphabets" in pink. The Email field has a validation message "email not valid" in pink. The Password field has a validation message "enter password" in grey. The Login button is a solid pink button.

Username  
enter only 6+ alphabets

Email  
email not valid

Password  
enter password

Login



A login form with a dark purple background and a pink flower illustration. The form contains four input fields and a Login button. The Username field contains the text "asdfgh". The Email field contains the text "sda@gmail.com". The Password field contains seven dots. The Login button is a solid pink button.

Username  
asdfgh

Email  
sda@gmail.com

Password  
.....

Login

10. Develop and demonstrate, using Java script script, a XHTML document that collects the RollNo(the valid format is: A digit from 1to 4 followed by two upper-case characters followed by two digits followed by two upper-case characters followed by three digits ;no embedded spaces allowed- e.g. 1AB23CD356, 1GC13CS345) of the user. Event handler must be included for the form element that collects this information to validate the input. Messages in the alert windows must be produced when errors are detected.

HTML-

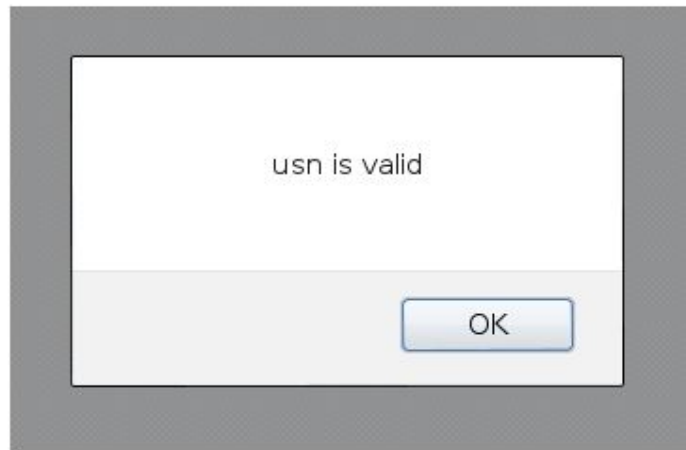
```
<html>
  <body>
    <script type="text/javascript">
      //define a function finder to perform the search and
      display appropriate message
      finder=function()
      {
        //get input
        var a=document.getElementById('usn').value;
        //find the length of the input 'a'
        if(a.length==0)
        {
          alert("USN is empty");
          return;
        }
        //convert the upper case input to lower case
        var b=a.toLowerCase();
        //check if the entered input is of the format
        "DAADDAADDD" where D=digit & A=alphabet
        var
str=b.search(/^[1-4][a-z][a-z][0-9][0-9][a-z][a-z][0-9][0-9][0-9]/);
        if(str==0)
          alert("usn is valid");
        else
          alert("usn is invalid");
      }
    </script>
    <!-- create a form to accept input & pass the input to the
    function finder() on submission of the form -->
    <form onsubmit=finder()>
      Enter USN in Upper Case(DAADDAADDD):<input id=usn
type=text><br>
      <input type=submit value=submit>
    </form>
  </body>
</html>
```

Enter USN in Upper Case(DAADDAADDD):

submit

Enter USN in Upper Case(DAADDAADDD): 1PQ10CS025

submit



Enter USN in Upper Case(DAADDAADDD): 1PQ

submit



Enter USN in Upper Case(DAADDAADDD):

submit



11. Write a javascript code to change the background color at frequent intervals.

HTML-

```
<html>
<head>
<title>bgColor</title>
<SCRIPT LANGUAGE="JavaScript1.2">
colors = new
Array("red","gray","yellow","orange","green","blue","brown","purple",)
colorIndex = 0
function changeColor() {
document.bgColor = colors[colorIndex]
colorIndex = (colorIndex + 1) % colors.length
}
function startColorChange() {
setInterval("changeColor()",3000)
}
window.onload = startColorChange
</SCRIPT>
</head>
<body bgcolor="white">
<h1 align="center">HTML TUTORIAL </h1>
<ol type=A>
<li> HTML stands for Hyper Text Markup Language </li>
<li> it contains elemets called tags </li>
</ol>
<hr>

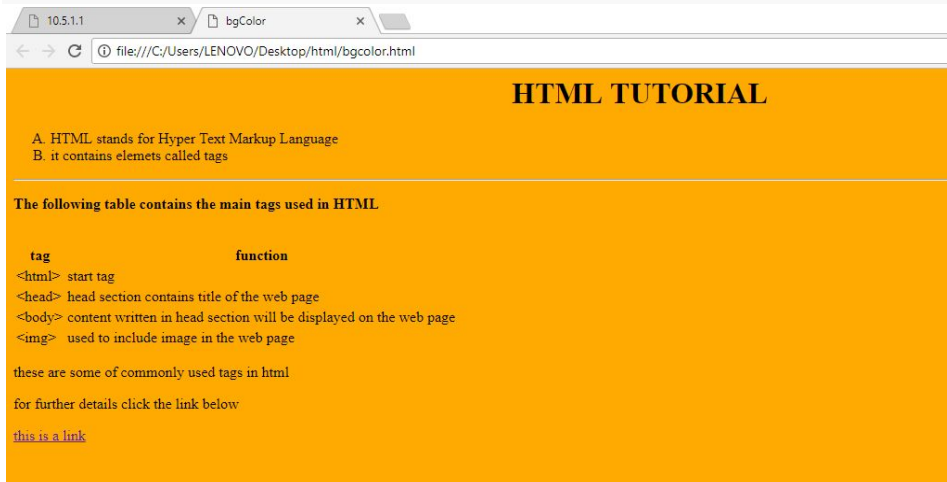
<p><b>The following table contains the main tags used in
HTML</b></p>
<br>
<table >
<tr>
<th>tag</th>
<th> function </th>
</tr>
<tr>
<td> &lt;html&gt;</td>
        <td> start tag</td>
</tr>
```

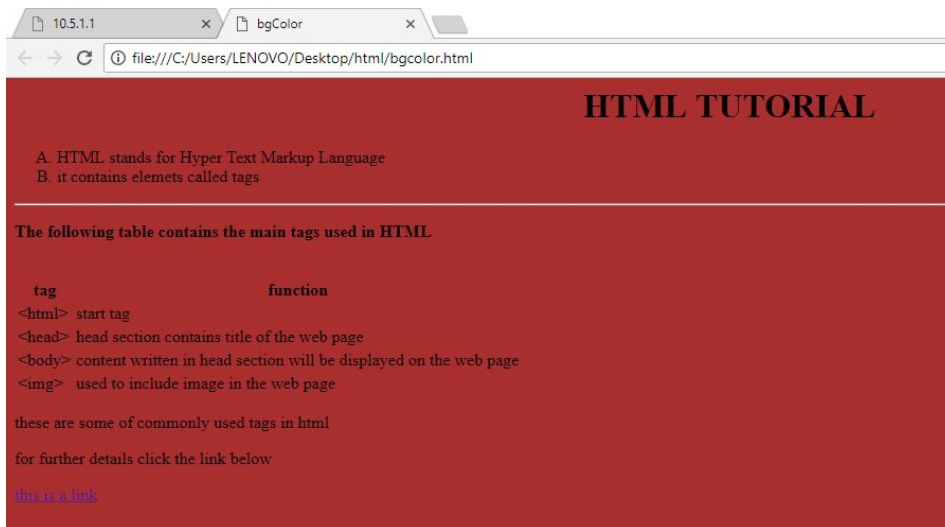


```

<tr>
<td> <!--head--></td>
      <td> head section contains title of the web page </td>
</tr>
<tr>
<td> <!--body--> </td>
<td> content written in head section will be displayed on the web
page</td>
</tr>
<tr>
<td> <!--img--></td>
      <td> used to include image in the web page</td>
</tr>
</table>
<p>these are some of commonly used tags in html </p>
<p> for further details click the link below </p>
<a href="https://www.computerhope.com/issues/ch001613.htm"> this
is a link </a> </P></body>
</html>

```

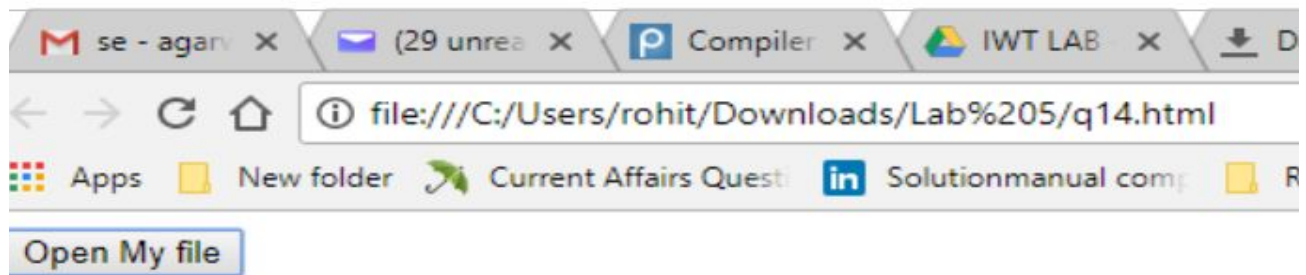




12. Write a javascript code to open the new document after particular intervals

HTML-

```
<!DOCTYPE html>
<html>
<head>
    <title>File Opening</title>
    <script src="file.js"></script>
</head>
<body>
<button onclick="openfile()">Open My file</button>
</body>
</html>
```



13. Write a javascript code to show the concept of cookies.

HTML-

```
<html>
<head>
<script type = "text/javascript">
<!--
function WriteCookie()
{
if( document.myform.customer.value == "" ){
alert("Enter some value!");
return;
}
cookievalue= escape(document.myform.customer.value) + ";";
document.cookie="name=" + cookievalue;
document.write ("Setting Cookies : " + "name=" + cookievalue );
}
//-->
</script>
</head>
<body>
<form name="myform" action="">
Enter name: <input type="text" name="customer"/>
<input type="button" value="Set Cookie" onclick="WriteCookie();"/>
</form>
</body>
</html>
```

