# LAB MANUAL

## HTML and CSS

# **HTML Headings**

```
<!DOCTYPE html>
<html>
<body>
<h1>Heading 1</h1>
<h2> heading 2</h2>
<h3> heading 3</h3>
<h4> heading 4</h4>
<h5> heading 5</h5>
<h6> heading 6</h6>
</body>
</html>
```

# **HTML** Paragraphs

```
HTML paragraphs are defined with the  tag: <!DOCTYPE html> <html> <body> Goodmorning !!  Have A Nice Day  </body> </html>
```

#### **HTML Links**

```
HTML links are defined with the <a> tag:
<!DOCTYPE html>
<html>
<body>
<h2> WELCOME TO MY PAGE </h2>
 BELOW IS A LINK TO YOUTUBE 
<a href="https://www.youtube.com/"> Click here</a>
</body>
</html>
```

# **HTML Images**

```
HTML images are defined with the <img> tag.
<!DOCTYPE html>
<html>
<body>
<h2>Image</h2>
An image of a butterfly:
<img src="C:\Users\Slaptop\Pictures\2019-03-10\but.jpg" width="204" height="242">
</body>
</html>
HTML Buttons
<!DOCTYPE html>
<html>
<body>
<h2> Buttons</h2>
click in the button below 
<button>Click here</button>
</body>
</html>
HTML Lists
HTML lists are defined with the  (unordered/bullet list) or the  (ordered/numbered list) tag, followed by
tags (list items):
<!DOCTYPE html>
<html>
<body>
<h2> Unordered List</h2>
Pen
Pencil
Eraser
<h2> Ordered List</h2>
<ol>
Pen
Pencil
Eraser
```

</body>

Attributes provide additional information about an element. Attributes usually come in name/value pairs like: name="value"

1) The href Attribute--- HTML links are defined with the <a> tag. The link address is specified in the href attribute:

```
<!DOCTYPE html>
<html>
<body>
<h2>This is a link</h2>
 Click below
<a href="https://www.youtube.com"> click here</a>
</body>
</html>
```

#### 2) The src Attribute

HTML images are defined with the <img> tag.

```
The filename of the image source is specified in the "src" attribute:
```

#### 3) The width and height Attributes

```
HTML images also have width and height attributes, which specifies the width and height of the image:Example:
```

```
<!DOCTYPE html>
<html>
<body>
<h2> image</h2>
 see below 
<img src="img.jpg" width="600" height="900">
</body>
</html>
```

# HTML Styles

```
Text colour
```

```
<!DOCTYPE html>
<html>
<body>

This is usual size
This is yellow
This is green
This is grey
This is bigger version
</body>
</html>
```

```
HTML style attribute
<tagname style="property:value;">
Background Color
<!DOCTYPE html>
<html>
   <body style="background-color:blue;">
      <h1>Welcome </h1>
        Royal Global University 
   </body>
</html>
Fonts
<!DOCTYPE html>
<html>
<body>
<h1 style="font-family:verdana;">Hello everyone</h1>
<h2 style="font-family:times new roman;">Hello everyone</h2>
<h3 style="font-family:impact;">Hello everyone</h3>
<h4 style="font-family:comicsans;">Hello everyone</h4>
<h5 style="font-family:aharoni;">Hello everyone</h5>
Hello everyone
</body>
</html>
Text Size
<!DOCTYPE html>
<html>
<body>
<h1 style="font-size:400%;"> Royal Global University</h1>
 Royal School of Engineering and Technology
</body>
</html>
Text Alignment
<!DOCTYPE html>
<html>
<body>
<h1 style="text-align:center;"> Royal Global University</h1>
 Royal School of Engineering and Technology
</body>
</html>
Text Formatting
<!DOCTYPE html>
<html>
<body>
<b>Royal Global University</b>
<i>Royal School of Engineering and Technology</i>
 Book by author<sub> [1990]</sub> and the findings are power <sup> 10 </sup>
</body>
</html>
```

# Formatting elements that are designed to display special types of text:

• <b>- Bold text <ins> Inserted text

<strong>- Important text <sub>-Subscript text

• <i>-Italic text <sup>-Superscript text

• <em>- Emphasized text <del>Deleted text

#### The HTML <b> element defines bold text

<body>

```
<!DOCTYPE html>
<html>
<body>
Usual font
<b>Bold</b>
</body>
</html>
The HTML <strong> element defines strong text
<!DOCTYPE html>
<html>
<body>
 Hello
<strong> Welcome to RGU page </strong>
</body>
</html>
HTML italics <i> and emphasized <em>
<!DOCTYPE html>
<html>
<body>
 Welcome .
<i> To RGU page .</i> 
<em> See below </em>
</body>
</html>
HTML <small> Element
<!DOCTYPE html>
<html>
<body>
<h2> This dissertation <small> should be </small> published </h2>
</body>
</html>
HTML <mark> Element
<!DOCTYPE html>
<html>
```

<h2>This is <mark> important</mark> document</h2> </body> </html> HTML <del> Element <!DOCTYPE html> <html> <body> Note that dissertations are <del> not </del> considered to be peer-reviewed documents So carefully review and evaluate the information presented in them </body> </html> HTML <ins> Element The HTML <ins> element defines inserted/added text. <!DOCTYPE html> <html> <body> Inserted text. You may find it difficult to find <ins>scholarly</ins> articles, and books in which your hypothesis is directly addressed . </body> </html> HTML <q> for Ouotations <!DOCTYPE html> <html> <body> Dissertation There are no statistical tests for validity. However, in some cases of validation, a researcher may receive a statement from another researcher indicating that they believe the instrument measures what it was designed to measure</q> </body> </html> HTML <blockquote> for Quotations <!DOCTYPE html> <html> <body> Blockquote <blockquote cite="https://ncu.libguides.com/researchprocess/dissertationresearch"> Dissertation topics are a special subset of research topics. All of the previously mentioned techniques can, and should, be utilized to locate potential dissertation topics, but there are also some special considerations to keep in mind when choosing a dissertation topic. </blockquote>

HTML <abbr> for Abbreviations <!DOCTYPE html>  <html> <body></body></html></abbr>
<p>The $<$ abbr title="Wireless Application Protocol">WAP $<$ /abbr> gateway is part of a protocol for protected use of the Internet $<$ /p>
The data is sent in HTTP form by a Web server to a WAP gateway.
HTML <address> for Contact Information <!DOCTYPE html>  <html> <body></body></html></address>
Contact information
<address> Edited by  Naina  Naina  www.mywebsite.com  Guwahati  Assam </address>
HTML <bdo> for Bi-Directional Override <!DOCTYPE html>  <html> <body></body></html></bdo>
      Write a comment here> 

#### **HTML Colours**

#### **Inline CSS**

</html>

```
Background colour
<!DOCTYPE html>
<html>
<body>
<h1 style="background-color:powderBlue;"> Information</h1>
Databases from the Library's home page. Many reviews in this database will include information about instrument
validity, as shown below
</body>
</html>
Text colour
<!DOCTYPE html>
<html>
<body>
<h3 style="color:Yellow;"> Welcome</h3>
</body>
</html>
Border colour
<!DOCTYPE html>
<html>
<body>
<h1 style="border: 3px solid Blue;"> RGU</h1>
<h2 style="border: 2px solid Green;">Royal School of Information and Technology</h2>
<h3 style="border: 2px solid Red;"> 5th sem </h3>
</body>
```

#### Color Values

```
<!DOCTYPE html>
<html>
<body>
 First Page
<h1 style="background-color:rgb(255, 0, 0);"> Welcome</h1>
<h1 style="background-color:#FF00FF;"> Royal Global University</h1>
</body>
</html>
```

#### HSL Value (hue, saturation, lightness)

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue. Saturation is a percentage value, 0% means a shade of gray, and 100% is the full color. Lightness is also a percentage, 0% is black, 50% is neither light or dark, 100% is white

```
<!DOCTYPE html>
<html>
<body>
<h1 style="background-color:hsl(0, 100%, 50%);"> Hello everyone</h1>
<h1 style="background-color:hsl(240, 100%, 50%);"> Hello everyone !!!!!</h1>
</body>
</html>
```

# $\underline{CSS}\mbox{-}\mbox{cascading Style Sheets (CSS) is a style sheet language}.$

# (Internal CSS)

<!DOCTYPE html>

- <html>
- <head>
- <style>

```
body {
 background-color: lightblue;
h1 {
 color: green;
 text-align: center;
p {
 font-family: comic sans ms;
 font-size: 20px;
 text-align: center;
</style>
</head>
<body>
<h1> Royal Global University</h1>
 Information Technology 
</body>
</html>
```

#### **Tables**

```
<!DOCTYPE html>
<html>
<head>
<style>
table {
font-family: verdana;
border-collapse: collapse;
width: 50%;
td, th {
border: 3px solid #ffdddd;
text-align: center;
padding: 10px;
}
</style>
</head>
<body>
<h2> Table</h2>
>
 <th> ID</th>
  Employee name
  Branch 
 234
 Mohana
 Mumbai
  222
```

```
Soham
Delhi
 675 
Martina Holoi
Assam
111
 Rohan
Delhi
</body>
</html>
```

### **External CSS**

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" type="text/css" href="extra.css">
</head>
        <body>
               <h1> RGU</h1>
                 RSIT 
        </body>
</html>
extra.css
body {
background-color: blue;
h1 {
 color: navy;
margin-left: 20px;
```

#### The <div >tag

The div tag is known as Division tag. The div tag is used in HTML to make divisions of content in the web page like (text, images, header, footer, navigation bar, etc). Div tag has both open(<div>) and closing (</div>) tag and it is mandatory to close the tag. The Div is the most usable tag in web development because it helps us to separate out data in the web page and we can create a particular section for particular data or function in the web pages.

```
<!DOCTYPE html>
<html>
<head>
```

```
<style>
div {
background-color: lightblue;
width: 300px;
border: 15px solid blue;
padding: 50px;
margin: 20px;
</style>
</head>
<body>
<h2>WEB TECHNOLOGY</h2>
 Browsers are the interpreters of the web
<diy>The methods by which computers communicate with each other through the use of markup languages and
multimedia packages is known as web technology. In the past few decades, web technology has undergone a
dramatic transition, from a few marked up web pages to the ability to do very specific work on a network without
interruption. </div>
</body>
</html>
```

#### Navigation menu

```
<!DOCTYPE html>
<html>
<head>
<title> WELCOME TO RGU</title>
<style>
ul {
list-style-type: none;
margin: 0;
padding: 20;
background-color: #ff3333;
 overflow: hidden;
li {
float: left;
}
li a {
 display: block;
color: white;
padding: 16px;
text-decoration: none;
 text-align: center;
li a:hover {
background-color: #00ff00;
</style>
</head>
<body>
```

<h2>ROYAL GLOBAL UNIVERSITY</h2>

```
  <a href="#home">Home</a>
  <a href="#news">Academics</a>
  <a href="#news">Departments</a>
  <a href="#contact">Contact</a>
  <a href="#about">About Info</a>

/body>
</html>
(CSS pseudo class selector used .----- hover selector)
```

padding:10px 5px 15px 20px;

- top padding is 10px
- right padding is 5px
- bottom padding is 15px
- left padding is 20px

#### **CSS** text-decoration

```
h1 {
  text-decoration: overline;
}
h2 {
  text-decoration: line-through;
}
h3 {
  text-decoration: underline;
}
h4 {
  text-decoration: underline overline;
}
```

#### **CSS Selectors**

CSS selectors are used to "find" (or select) the HTML elements you want to style.

We can divide CSS selectors into five categories:

- 1. Simple selectors (select elements based on name, id, class)
- 2. Combinator selectors (select elements based on a specific relationship between them)
- 3. Pseudo-class selectors (select elements based on a certain state)
- 4. Pseudo-elements selectors (select and style a part of an element)
- 5. Attribute selectors (select elements based on an attribute or attribute value)

The CSS element Selector

The element selector selects HTML elements based on the element name.

The selector points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

#### 1) Simple selectors

#### The class selector

The class selector selects HTML elements with a specific class attribute.

To select elements with a specific class, write a period (.) character, followed by the class name.

```
<!DOCTYPE html>
<html>
<head>
<style>
.games{
background-color: blue;
color: white;
margin: 20px;
padding: 20px;
</style>
</head>
<body>
<div class="games">
<h2>Cricket</h2>
 My cricket ball
</div>
<div class="games">
<h2>badminton</h2>
 My badminton racket 
</div>
```

```
<div class="games">
<h2>Hockey</h2>
 My hockey stick 
</div>
</body>
</html>
```

#### **Multiple classes**

```
<!DOCTYPE html>
<html>
<style>
.game {
background-color: powderblue;
color: black;
padding: 10px;
.rule {
text-align: center;
</style>
<body>
<h2>Choose one game</h2>
Games
<h2 class="game rule">Cricket</h2>
<h2 class="game">Badminton</h2>
<h2 class="game">Tennis</h2>
</body>
</html>
```

#### **The CSS id Selector**

The id selector uses the id attribute of an HTML element to select a specific element. To select an element with a specific id, write a hash (#) character, followed by the id of the element.

```
<!DOCTYPE html>
<html>
<head>
<style>
#par {
    text-align: center;
    color: blue;
}
</style>
</head>
<body>

</style>
</head>
<body>
```

```
 Click below to see the pages  </body> </html>
```

#### **The CSS class Selector**

```
To select elements with a specific class, write a period (.) character, followed by the class name.

<!DOCTYPE html>
<html>
<head>
<style>
.sect {
    text-align: center;
    color: darkgreen;
}
</style>
</head>
<body>
<hl class="sect"> Royal Global University</hl>

    p class="sect"> Welcome to University Website 
</body>
</html>
```

#### We can also specify one specific HTML elements which should be affected by the class.

```
<!DOCTYPE html>
<html>
<head>
<style>
p.myclass {
    text-align: center;
    color: red;
}
</style>
</head>
<body>
<h1 class="myclass"> Royal Global University </h1>
 Educational Website 
</body>
</html>
```

#### HTML elements can also refer to more than one class.

```
<!DOCTYPE html>
<html>
<head>
<style>
p.myclass {
    text-align: center;
    color: red;
}

p.value {
    font-size: 300%;
}
```

```
</style>
</head>
<body>
<h1 class="myclass"> Royal Global University </h1>
 Educational Website 
Welcome to the webpage
</body>
</html>
The CSS * selector (Universal selector)-- The * selector selects all elements. The * selector can also
select all elements inside another element.
<!DOCTYPE html>
<html>
<head>
<style>
*{
color:blue;
</style>
</head>
<body>
<h1>Welcome to RGU Webpage</h1>
<div class="intro">
 Neha 
  RSET 7th sem
</div>
 All details are mentioned 
</body>
</html>
```

#### **The CSS Grouping Selector**

The grouping selector selects all the HTML elements with the same style definitions.

Example the h1, h2, and p elements have the same style definitions.

```
h1, h2, p {
  text-align: center;

color: red;
}
```

#### 3. Pseudo Selectors

**Pseudo Selectors** in css specify a special state of current selector. **Pseudo Selectors** are divided as **Pseudo Class** and **Pseudo elements**. To use **pseudo selectors**, colon (:) is used after selector.

**Pseudo Class** can change properties of an element on particular event, like mouseover, focus etc.

Pseudo Elements are used to call particular child of parent, like first-line, first-letter etc.

#### **Pseudo Classes**

- 1. :link
- 2. :visited
- 3. :active
- 4. :focus
- 5. :hover

#### **Pseudo Elements**

- 1. :first-line
- 2. :first-letter
- 3. :first-child
- 4. :before
- 5. :after

#### **Registration Form with Table**

**Question :** To create a registration form as mentioned below.

#### **Procedure:**

Create an html page named as "registration.html"

- a) set background colors
- b) use table for alignment
- c) provide font colors & size

#### Answer:

```
<!DOCTYPE html>
<html>
<head>
<title>Registration Form </title>
</head>
<body> <center>
<h2>Registration Form</h2></center>
<form name=form1 >
```

```
<h2>Enter Name :</h2> <input type=text name=t1
size=18>
<h2>Enter Age :</h2> <input type=text name=t2
maxlength=3 size=18>
align=left><h2>Name of College :</h2> align=right><textarea name=ta rows=5
cols=15></textarea>
<h2>Course :</h2> <input type=radio name=r1
value="s1">B Tech<br>
<input type=radio name=r1 value=s2>BSc IT
<h2>Languages known :</h2> <center>(More than one
option can be selected)</center>
<input type=checkbox name=c1 value=c>C<br>
<input type=checkbox name=c2 value=c++>C++<br>
<input type=checkbox name=c3 value=python>Python<bre>
<input type=checkbox name=c4 value=java>JAVA<br>
<input type=checkbox name=c5 value=ruby>Ruby<br>
align=left><h2>Enter your Password :</h2> align=right><input type=password
name=t3 size=18>
<center>
<input type=reset value=" Reset " >
<input type=submit value=" Submit " >
</form>
</html>
```

## Website layout - Using float

```
<!DOCTYPE html>
<html>
<head>
<title>CSS Website Layout</title>
```

```
<style>
 box-sizing: border-box;
}
body {
margin: 0;
}
/* Style the header */
.header {
 background-color: #f1f1f1;
 padding: 20px;
 text-align: center;
}
/* Style the navigation bar */
.nav {
 overflow: hidden;
 background-color: #00f633;
}
.nav a {
 float: left;
 display: block;
 padding: 12px 14px;
 text-decoration: none;
```

```
color: #f1f2f1;
 text-align: center;
}
.nav a:hover {
 color: black;
 background-color: #00f633;
}
. inside \; \{
 float: left;
 width: 33.33%;
 padding: 15px;
}
.footer{
        float:right;
       height:50px;
        width:100%;
        padding:120px;
       background:#ccc004;
}
/* Clear floats after the columns */
/* Responsive layout */
@media screen and (max-width:600px) {
```

```
.inside{
  width: 100%;
</style>
</head>
<body>
<div class="header">
 <h1>ROYAL GLOBAL UNIVERSITY</h1>
 </div>
<div class="nav">
 <a href="http://www.google.com">Academics</a>
 <a href="web.html">Home</a>
 <a href="#">About Info</a>
</div>
<div class="outside">
 <div class="inside">
  <h2>Academics</h2>
```

Royal Global University's (RGU) approach towards formal education is learner-centric and as such the University has adopted Choice Based Credit System (CBCS) to allow flexibility in the education system, so that students depending upon their interests, learning needs and aptitude can choose inter-disciplinary, intra-disciplinary and skill- based courses along with emphasis on enhancing students' ability in Communication Skills and Behavioural Approach. CBCS makes education broad-based and at par with global standards, which is the need of the hour. The motive of a holistic education is to infuse ethical values and morals in an individual's consciousness along with cultivating intellectual minds to bring a positive change in society n velit.

```
</div>
 <div class="inside">
  <h2>Reports</h2>
  Core courses are those, the knowledge of which are deemed essential for students registered for the
program. A student has to compulsorily take these subjects. The subjects designed under this category
aim to cover the knowledge that a student is expected to imbibe in that particular discipline, along with
compulsory summer internships, projects, dissertation, field study/clinical exposure etc.. For example, the
core course for a student pursuing MBA in Human Resource and Marketing in Royal Global University
will comprise of subjects related to his/her specialisations along with the compulsory foundation courses
of MBA.
 </div>
 <div class="inside">
  <h2>News</h2>
  Honourable Education Minister, Government of Assam, Sri Siddhartha Bhattacharya will pay a
visit to Royal Global University (RGU) for the unveiling ceremony of the Bust of Bharat Ratna, Lt. Dr.
A.P.J. Abdul Kalam and an interactive session on 4 September 2020(tomorrow) at 3.00 PM at Royal
D'Auditorio, Block-A, 5th Floor, RGU.
 </div>
  <div class="footer">
  <h2> Royal@gmail.com </h2>
 </div>
</div>
</body>
```

# Flex web layout

```
<!DOCTYPE html>
<html>
<head>
```

</html>

```
<title>Flex layout</title>
<style>
* {
 box-sizing: border-box;
}
body {
 font-family: sans-serif;
 margin: 0;
}
.header {
 padding: 5px;
 text-align: center;
 background: lightblue;
 color: white;
}
.header h1 {
 font-size: 60px;
}
.nav {
 overflow: hidden;
 background-color: #333000;
 top: 0;
}
/* Style the navigation bar links */
.nav a {
 float: left;
```

```
display: block;
 text-decoration: none;
 text-align: center;
 color: white;
 padding: 14px 20px;
}
.nav a:hover {
 background-color: #ddd111;
 color: black;
}
/* current link */
.nav a.current {
 background-color: #666;
 color: white;
}
/* The container */
.box {
 display: flex;
  flex-wrap: wrap;
}
/* left content */
.leftside {
```

```
flex: 30%;
 background-color: #f1f1f1;
 padding: 20px;
}
/* Main content in the right section*/
.rightside {
 flex: 70%;
 background-color: white;
 padding: 20px;
}
.inside{
 background-color: #aab;
 width: 100%;
 padding: 20px;
}
/* Footer */
.footer {
 padding: 20px;
 text-align: center;
 background: #FFFF99;
```

/\* Responsive layout \*/

```
@media screen and (max-width: 700px) {
 .box {
  flex-direction: column;
 }
}
/* Responsive layout */
@media screen and (max-width: 400px) {
 .nav a {
  float: none;
  width: 100%;
</style>
</head>
<body>
<div class="header">
 <h1>Royal Global University</h1>
 A <b>bridge</b> to the ocean of knowledge
<img src="C:/x/s/2020/pic.jpg" ALT="pic" width="1800" height="200" style="border:none" />
</div>
<div class="nav">
 <a href="web.html" class="current">Home</a>
 <a href="academic.html">Academics</a>
 <a href="dept.html">Departments</a>
 <a href="contact.html">Contact</a>
```

```
</div>
<div class="box">
 <div class="leftside">
  <h2>Current news</h2>
  <h3>Feed</h3>
              Educational institution or establishment, in particular one providing higher
education or specialized professional or vocational training
              <h3>Curriculum</h3>
              <a href="C:/x/s/2020/but.jpg"><img src="C:/x/s/2020/but.jpg" ALT="butterfly"
width="460" height="200"
              style="border:none" /></a>
              <h3>Subjects</h3>
              <div class="inside" style="height:5px;">First</div><br>
                     <a href="C:/x/s/2020/book.jpg"><img src="C:/x/s/2020/book.jpg"
ALT="book" width="460" height="200" style="border:none" /></a>
              <div class="inside" style="height:5px;">Second</div><br>
              <div class="inside" style="height:5px;">Third</div>
 </div>
 <div class="rightside">
       <h2>VISION</h2>
```

```
<h5> Vision of the college</h5>
```

style="border:none" /></a>

```
\label{limits} $$ \sim href="C:/x/s/2020/read.jpg">< img src="C:/x/s/2020/read.jpg" ALT="read" width="1200" height="300"
```

Our college is driven to provide excellent educational opportunities that are responsive to the needs of our students, and empower them to meet and exceed challenges as active.

the needs of our students, and empower them to meet and exceed challenges as active participants in shaping the future of our world.

The college provides students with quality educational experiences and support services that lead to the successful completion of degrees, transfer, certificates, career/technical education and basic skills proficiency.

<br/>br>

Students to have new curriculum in 2022, framework to be developed: PM Modi. Prime Minister Narendra Modi on Friday said that a national curriculum framework will be developed and students should have a new curriculum in 2022 when the nation marks the 75th year of independence.

```
</div>
</div>
<div class="footer">
<h2>Accolades</h2>
</div>
</body>
```

# WEB Layout ---- Grid

```
<!DOCTYPE html>
<html>
<head>
<style>
.class1
 grid-area: headpart;
.class2
 grid-area: body;
.class3
 grid-area: leftcontent;
.class4
 grid-area: rightcontent;
.class5
 grid-area: endnote;
.box-grid
        display: grid;
        grid-template-areas:
  'headpart headpart headpart headpart'
  'leftcontent body body rightcontent'
  'endnote endnote endnote rightcontent';
        grid-gap: 5px;
        background-color: #11fff3;
        padding: 10px;
}
.box-grid > div /* selects all the div elements */
```

```
background-color: lightblue;
 text-align: center;
 padding: 20px 0;
 font-size: 40px;
</style>
</head>
<body>
<h1></h1>
<div class="box-grid">
 <div class="class1">Head part</div>
 <div class="class2">Body</div>
 <div class="class3">Leftcontent</div>
 <div class="class4">Right content</div>
 <div class="class5"> End note</div>
</div>
</body>
</html>
```

# **JavaScript**

## Addition of two numbers in prompt window

```
<html>
<head>
<title> Java Script </title>
<script type="text/javascript">
<!--
    var s1,s2,a,b,sum;
    //read first number
    s1=window.prompt("Enter first number:");
    //read second number
    s2=window.prompt("Enter second number:");

    a=parseInt(s1);
    b=parseInt(s2);
    sum=a+b;
    document.writeln("<h1>The Sum is "+sum+"</h1>");
-->
</script>
```

```
</head>
<body>
Click Refresh to run this script again!

</body>
</html>
```

## Average of 5 numbers using prompt

```
<html>
<head>
<title> Java Script </title>
<script type="text/javascript">
 var loop=0,total=0,value,avg,str;
 while(loop<5)
  str=window.prompt("Please enter your marks:");
  value=parseInt(str);
  total=total+value;
  loop++;
 avg=total/5;
 document.write("<h1>Your total is "+total+" and average is "+avg+"</h1>");
-->
</script>
</head>
<body>
Click Refresh to run this script again!
</body>
</html>
```

## **Calculate compound interest**

```
<html>
<head>
<title> Java Script </title>
<style type="text\css">
table { width: 100%}
th {text-allign:left}
</style>
<script type="text/javascript">
<!--
var amt,principal=1000.0,rate=0.05,yr;
document.writeln("");
document.writeln("<caption> Calculating compound interest </caption>");
document.writeln("YearAmount");
//Output for each row
 for(yr=1;yr \le 10;yr++)
  amt=principal * Math.pow(1.0+rate,yr);
```

```
//amt=principal*rate*yr;
document.writeln(""<" +yr+ "</td><" +amt+" "</td>
);
document.writeln("");
-->
</script>
</head>
<body>
</html>
```

## Sorting an array

```
<html>
<head>
<title> Java Script</title>
<script type="text/javascript">
var a=[8,3,34,10,3,37,663,2,6,66];
document.writeln("<h2>Sorting an array</h2>");
result("Array before sorting:- &nbsp",a);
sortArray(a);
result("Array after sorting:- &nbsp",a);
function result(h,array)
 document.writeln("<b>"+h + array.join(" ")+"</b>");
function sortArray(arr)
 var i,j,t;
 for(i=0;i<arr.length;i++)
   for(j=i;j<arr.length;j++)
        if(arr[i]>arr[j])
          t=arr[i];
          arr[i]=arr[j];
          arr[j]=t;
</script>
</head>
<body>
</body>
</html>
```

setInterval() function

```
<html>
<head>
<title> Java Script Events</title>
<script type="text/javascript">
<!--
var seconds=0;
function startTimer()
{
window.setInterval("updateTime()",1000); //The setInterval() method repeats a given function at every
given time-interval. //window.setInterval(function, milliseconds);
function updateTime()
 ++seconds;
 document.getElementById("sf").innerHTML=seconds;
-->
</script>
</head>
<body onload="startTimer()">
<h2> Time Spent Viewing This Page So Far in seconds: <font size=10 id="sf">0</font></h2>
</body>
</html>
Event
<html>
<head>
<title> example</title>
<script type="text/javascript">
<!--
var col,q;
```

```
function color(q,col)
 document.bgColor=col;
 alert(col);
}
-->
</script>
</head>
<br/>body bgcolor=gray>
<form name=mform>
<input type="button" value=RED onclick=color(this.form,"RED")>
<input type="button" value=GREEN onclick=color(this.form,"GREEN")>
<input type="button" value=BLUE onclick=color(this.form,"BLUE")>
<input type="button" value=VIOLET onclick=color(this.form,"VIOLET")>
<input type="button" value=YELLOW onclick=color(this.form,"YELLOW")>
<input type="button" value=ORANGE onclick=color(this.form,"ORANGE")>
</body>
</html>
```

#### **Event**

```
<html>
<head>
<title> Java Script </title>
<script type="text/javascript">
<!--
function func()
{
```

```
alert("You have Double clicked");
}
-->
</script>
</head>
<body bgcolor=green ondblclick="func()">
<h1>
Double click event.
<br > br > Double click in the document.
</h1>
</body>
</html>
Event
<html>
<head>
<title> Java Script </title>
<script type="text/javascript">
<!--
function func()
 window.alert("You have pressed a key!!");
 //window.alert("You have done keyup event!!");
 //window.alert("You have done keydown event!!");
}
-->
</script>
</head>
<body onkeypress="func()">
```

```
<!--body onkeyup="func()"-->
<!--body onkeydown="func()"-->
<h1>
This is a sample page to illustrate key related events
</h1>
</body>
</html>
Write a program in Java Script for creating and storing cookies
<html>
<head>
<title>cookie example</title>
<script type="text/javascript">
<!--
 var now=new Date();
 var hour=now.getHours();
 var name;
 if(hour<12)
  {
        document.write("<h1>Good Morning");
  }
 else
    hour=hour-12;
                if(hour<6)
                 document.write("<h1>Good Afternoon");
```

```
else
                    document.write("<h1>Good evening");
 }
 if(document.cookie)
 {
             var myCookie=(document.cookie);
              var cookieTokens;
              name=cookieTokens[1];
 }
  else{
        name=window.prompt("Please enter your name");
        document.cookie="name"(name);
      }
      document.writeln(name);
__>
</script>
</head>
<body>
<h1>end of script</h1>
</body>
</html>
Event
<!DOCTYPE html>
<html>
<head>
```

```
</head>
<body>
    <select id="pd" onchange="view()">
         <option value="Default Color">Select Color
         <option value="yellow">Yellow</option>
         <option value="green">Green</option>
         <option value="red">Red</option>
      </select>
      <script type="text/javascript">
         function view()
           var value = document.getElementById("pd").value;
           if (value != "Default Color")
             document.bgColor = value;
             document.cookie = "pd=" + value;
         window.onload = function ()
           if (document.cookie.length != 0)
           {
             var array = document.cookie;
             document.getElementById("pd").value = array[1];
             document.bgColor = array[1];
```

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

### **Example of split**

```
<html>
<head>
<title> String Example </title>
<script type="text/javascript">
<!--
function splitting()
{
 var inp=document.getElementById("val").value;
 var tokens=inp.split(" ");
 document.getElementById("res").value= tokens.join("\n");
 document.getElementById("sd").value=inp.substring(0,10);
}
-->
</script>
</head>
<body>
<form id="myform" action="">
<h3>Enter a sentence<br>
<input id="val" type="text" size="40">
<input type="button" value="Split" onclick= "splitting()"><br>
After splitting the sentence<br>
```

```
<textarea id="res" rows="9" cols="44"></textarea>
The first 10 characters of sentence are
<input id="sd" type="text" size="15">
</form>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<script>
var x = "";
function view() {
 try {
  addalert("Welcome!");
 catch(e) {
  x = "An error has occurred on this page.\n\n";
  x += "Click OK \n";
  x += "Click cancel to return to homepage\n\n";
  if(!confirm(x)) {
   document.location;
</script>
<body>
<h2>Error Handling</h2>
```

```
<input type="button" value="Display" onclick="view()" /> </body>
</html>
```

#### Example [ indexOf() and lastIndexOf () ]

```
<html>
<head>
<title> String Example </title>
<script type="text/javascript">
<!--
var words="The quick brown fox jumps over the lazy dog dog dog";
function buttonPressed()
 var srch=document.getElementById("Forms");
 var inp=document.getElementById("V1");
 srch.elements[2].value= words.indexOf(inp.value);
 srch.elements[3].value= words.lastIndexOf(inp.value);
 srch.elements[4].value= words.indexOf(inp.value);
 srch.elements[5].value= words.lastIndexOf(inp.value);
}
-->
</script>
</head>
<body>
<form id="Forms" action="">
<h2>The string is :<br>
The quick brown fox jumps over the lazy dog dog dog</h2>
<h3>Enter the string you want to search for
```

```
<input id="V1" type="text">
<input id="search" type="button" value="Search" onclick= "buttonPressed()"><br/>br></h3>
First appearence of the string is at index
<input id="first" type="text" size="5"><br>
Last appearence of the string at index
<input id="last" type="text" size="5"><br>
</form>
</body>
</html>
```