

# MOHANDAS COLLEGE OF ENGINEERING AND TECHNOLOGY

Anad, Nedumangad Thiruvananthapuram-695 544



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## LAB RECORD

Name .....

University Reg No.....

Class..... Branch.....

Year.....

From Page No..... To.....

# MOHANDAS COLLEGE OF ENGINEERING AND TECHNOLOGY

ANAD, NEDUMANGAD THIRUVANANTHAPURAM-695 544



## LAB RECORD

Name .....  
University Reg No.....  
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Year.....  
From Page No..... To.....

Certified Bonafide Record of Work Done By

Place.....

Date.....

(Staff in Charge)

Examiners

External

Internal

# INDEX

[illegible]

[illegible]

**Experiment No : 1**  
**Date : 11-11-2021**

## **WEB PAGE USING HTML TAGS**

### **AIM**

To model a simple HTML file to demonstrate the use of different tags.

### **SOURCE CODE**

```
<html>
<head>
    <title>Demonstrate Different Tags</title>
</head>
<body>
    <h1>This is 1st level heading</h1>
    <h2>This is 2nd level heading</h2>
    <h3>This is 3rd level heading</h3>
    <h4>This is 4th level heading</h4>
    <h5>This is 5th level heading</h5>
    <h6>This is 6th level heading</h6>
    <p>This is a normal paragraph.
        <strong>The HyperText Markup Language</strong>, or <u>HTML</u> is the
        <mark>markup language</mark> for documents designed to be displayed in a
        <b>web browser</b>. It can be assisted by technologies such as <i>Cascading Style
        Sheets</i> and scripting languages such as <em>JavaScript</em>.
    </p>
    <hr>
    <h3>An Unordered HTML List</h3>
    <ul type="circle"> <!--type="circle/disc/square"-->
        <li>Coffee</li>
        <li>Tea</li>
        <li>Milk</li>
    </ul>
    <h3>An Ordered HTML List</h3>
    <ol type="1"> <!--type="i/I/a/A/1"-->
        <li>Coffee</li>
        <li>Tea</li>
        <li>Milk</li>
    </ol>
    <hr>
    <h3>Links in HTML</h3>
    Home Page: <a href="/testinglink.html">External Page Linking</a>, Mail Id:
    <a href="mailto:samplemail@gmail.com">mailto@edu.com</a><br>
    <hr>
    <h3>Table in HTML</h3>
```

```

<table border="1">
<tr>
    <th>Sl No</th>
    <th>Name</th>
    <th>Place</th>
</tr>
<tr>
    <td>001</td>
    <td>Name 01</td>
    <td>Kerala</td>
</tr>
<tr>
    <td>002</td>
    <td>Name 02</td>
    <td>Tamil Nadu</td>
</tr>
</table>
<hr> <h3>Form in HTML</h3>
<form>
    Enter your name: <input type="text"
name="txt1"><br><br> Enter your Email Id: <input
type="mail" name="mail1"><br><br>
    Enter your Phone Number: <input type="number"
name="mnum"><br><br> Enter your DOB: <input type="date"
name="dob"><br><br>
    Describe : <textarea name="txtarea"></textarea><br><br>
    <fieldset>
        <legend>Check those that apply</legend>
        <input type="radio" name="radio" value="1"> Radio button
        <input type="radio" name="radio" value="2" checked> Radio
            button 2 (initially checked)<br>
        <input type="checkbox" name="checkbox"> Checkbox 1
        <input type="checkbox" name="checkbox2" checked> Checkbox 2 (initially
checked)
    </fieldset>
</form> <br>
<hr><h3>Text-level markup</h3>
<br>
1. Here we have some <strike>strikethrough</strike> text<br>
2. Here we have some <sup>superscript</sup> text <br>
3. Here we have some <sub>superscript</sub> text <br>
4. Here we have some <big>big</big> text <br>
5. Here we have some <small>small</small> text <br>
6. <font style = "color:red">Red Colored Text</font><br>
<hr>

```

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

## RESULT

The HTML file is executed and verified.

## OUTPUT

### This is 1st level heading

### This is 2nd level heading

### This is 3rd level heading

### This is 4th level heading

### This is 5th level heading

### This is 6th level heading

This is a normal paragraph. The HyperText Markup Language, or HTML is the markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

### An Unordered HTML List

- Coffee
- Tea
- Milk

### An Ordered HTML List

1. Coffee
2. Tea
3. Milk

### Links in HTML

Home Page: [External Page Linking](#), Mail Id: [mailto@edu.com](mailto:mailto@edu.com)

### Table in HTML

Sl No	Name	Place
001	Name 01	Kerala
002	Name 02	Tamil Nadu

### Form in HTML

Enter your name:

Enter your Email Id:

Enter your Phone Number:

Enter your DOB:

Describe :

Check those that apply

- ☐ Radio button 
 ☒ Radio button 2 (initially checked)
- ☐ Checkbox 1 
 ☒ Checkbox 2 (initially checked)

### Text-level markup

1. Here we have some ~~strikethrough~~ text
2. Here we have some <sup>superscript</sup> text
3. Here we have some <sup>superscript</sup> text
4. Here we have some big text
5. Here we have some small text
6. Red Colored Text





Minimum marks required: 50% to 60% (a CGPA above 6/10 is considered good) in Bachelor's; 55% and above in Class 12th. Class 10th marks do not matter in most

cases.

---

[Ques1](#)

**Q. What is MCA or Master of Computer Application?**

**A. Master of Computer Applications or MCA** is a professional degree in computer science. MCA is a two year long professional post-graduate degree course for students who deeply want to learn computer application development. The MCA course is a combination of both theoretical and practical knowledge. With an MCA degree, students can learn different tools meant to develop better and faster computer applications and software

**Q. What career opportunities are associated with MCA?**

[Ques2](#)

**A. MCA course** will give students an understanding about how to develop better computer applications and software. There are a lot of career opportunities associated with MCA, and students may have great employment options in top IT firms, MNCs and top consultancy firms. Candidate with high computer skills are in high demand in the IT sector. And MCA graduates will also have many opportunities associated with the government sector. Candidates can crack interviews and get the desired profiles as per their skills and caliber. Candidates can get jobs in areas such as banking, networking, IT companies, desktop publishing, and more. Candidates can work on live projects, entry level programmer and maintaining software/application. Candidate seeking options in the teaching profession with an MCA degree is also an option. Candidates can apply for the post of a lecturer in reputed colleges/universities.

[Click Here to TOP](#)

**table.html**

```

        <th rowspan=8>Semester 1</th>
    </tr>
    <tr><td>Mathematical FoundationFor Computing</td>
        <tr><td>Digital Fundamentals & Computer Architecture</td></tr>
        <tr><td>Advanced Data Structure</td></tr>
        <tr><td>Advanced Software Engineering</td></tr>
        <tr><td>Python Lab</td></tr>
        <tr><td>Web Programming Lab</td></tr>
        <tr><td>Data Structure Lab</td></tr>
    </tr>
</table></center>
</body>
</html>

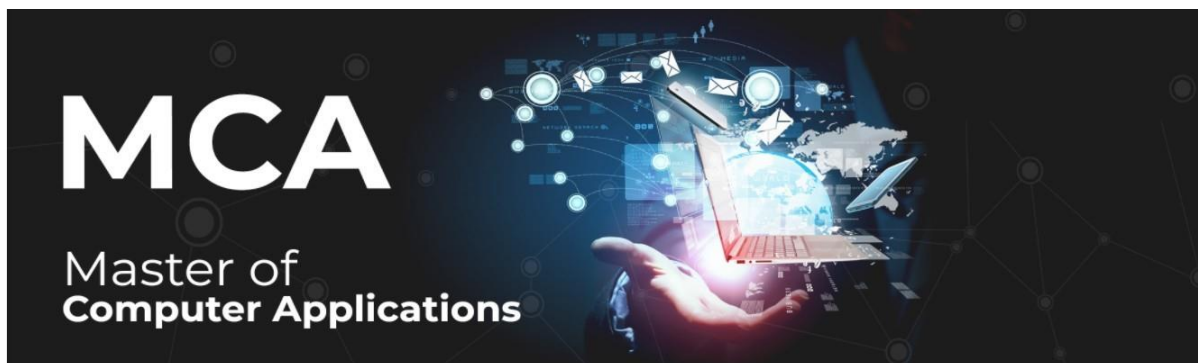
```

## RESULT

The HTML file is executed and verified.

## OUTPUT

index.html



### Master of Computer Applications

Master of Computer Applications or MCA is a professional degree in computer science. MCA is a two year long professional post-graduate degree course for students who deeply want to learn computer application development. The MCA course is a combination of both theoretical and practical knowledge.

[Course Curriculum for MCA](#) [What is MCA](#) [Career Opportunities](#)



### Eligibility Criteria for MCA

According to AICTE, to pursue an MCA course candidates must have pursued **BCA/ BSc/ BCom/ BA** degree with Mathematics as one of the subjects at 10+2 level or at graduation. Minimum marks required: 50% to 60% (a CGPA above 6/10 is considered good) in Bachelor's; 55% and above in Class 12th. Class 10th marks do not matter in most cases.

#### Q. What is MCA or Master of Computer Application?

A. Master of Computer Applications or MCA is a professional degree in computer science. MCA is a two year long professional post-graduate degree course for students who deeply want to learn computer application development. The MCA course is a combination of both theoretical and practical knowledge. With an MCA degree, students can learn different tools meant to develop better and faster computer applications and software

#### Q. What career opportunities are associated with MCA?

A. MCA course will give students an understanding about how to develop better computer applications and software. There are a lot of career opportunities associated with MCA, and students may have great employment options in top IT firms, MNCs and top consultancy firms. Candidate with high computer skills are in high demand in the IT sector. And MCA graduates will also have many opportunities associated with the government sector. Candidates can crack interviews and get the desired profiles as per their skills and caliber. Candidates can get jobs in areas such as banking, networking, IT companies, desktop publishing, and more. Candidates can work on live projects, entry level programmer and maintaining software/application. Candidate seeking options in the teaching profession with an MCA degree is also an option. Candidates can apply for the post of a lecturer in reputed colleges/universities.

[Click Here to TOP](#)

table.html

Semester 1	Mathematical FoundationFor Computing
	Digital Fundamentals & Computer Architecture
	Advanced Data Structure
	Advanced Software Engineering
	Python Lab
	Web Programming Lab
	Data Structure Lab

**Experiment No : 3**  
**Date: 24-11-2021**

## **FRAMES**

### **AIM**

To model a simple HTML file to demonstrate the different types of frames.

### **SOURCE CODE**

#### **Navigation.html**

```
<html>
<head>
<title>
Nav</title>
<head/>
<frameset cols=15%,85% style="background-color :#cba43b;">
<frame name="abc" src="link.html">
<frame name="link" >
</frameset>
</html>
```

#### **Link.html**

```
<html>
<head>
<title></title>
<style>
table{
width:50%;
height:50%;
}
td{
text-align:left;
padding:14px;
}
th{
text-align:left;
font-style:italic;
padding:14px;
}
a:link{
background-color:white;
color:black;
border:2px solid green;
padding:10px 20px;
text-align:center;
display:inline-block;
text-decoration:none;
}
}
```

```

a:hover,a:active{
background-color:green;
color:white;
}
</style>
<body>
<a href="page2.html" target="link">MOHANDAS COLLEGE</a><br><br>
<a href="resume.html" target="link">MASTER OF COMPUTER
APPLICATION</a><br><br>
<a href="page1.html" target="link">MASTER OF BUSSINESS
ADMINISTRATION</a><br><br>
</body>
</html>

```

### Page1.html

```

<html>
<body>
<center>
  <h2>Floating Frame</h2><br>
  <iframe src="https://www.mba.com/" width="800px" height="500px"></iframe>

</center>
</body>
</html>

```

### Page2.html

```

<html>

  <head>
    <title>Mixed Frames</title>
  </head>

  <frameset cols = "33.33%,33.33%,33.33%">
    <frame name = "top" src = "https://mcetonline.com/" />
    <frame name = "main" src = "https://www.cet.ac.in/" />
    <frameset rows = "50%,50%">
      <frame name = "top" src = "https://tkmce.ac.in/" />
      <frame name = "main" src = "https://gectcr.ac.in/" />
    </frameset>

    <noframes>
      <body>Your browser does not support frames.</body>
    </noframes>

  </frameset>

</html>

```

### Page3.html

```

<html>

```

```

<head>
<title>MASTER OF COMPUTER APPLICATION</title>
<style>
table{
width:50%;
height:50%;
}
td{
text-align:left;
padding:14px;
}
th{
text-align:left;
font-style:italic;
padding:14px;
}
a:link{
background-color:white;
color:black;
border:2px solid green;
padding:10px 20px;
text-align:center;
display:inline-block;
text-decoration:none;
}
a:hover,a:active{
background-color:green;
color:white;
}
</style>
</head>
<body style="background-color :#cba43b;">
<center><u><h1 style="color: #000000;">MASTER OF COMPUTER
APPLICATION</h1></u>
<p>Master of Computer Applications (MCA) is a two year professional post-graduate
programme<br> for candidates wanting to delve deeper into the world of computer
application development with the<br> help of learning modern programming language. The
programme is a blend of both theoretical and practical knowledge. <br>An MCA degree
endows students' an opportunity to work with tools meant to develop better and faster
applications.<br>
<a href="page1.html">MASTER OF BUSSINESS ADMINISTRATION</a>

</center>

</body>
</html>

```

### **mystyle.css**

```

body {
background-color: MediumSeaGreen;

```

```

}
h1{
font-size:20;
text-align:center;
}

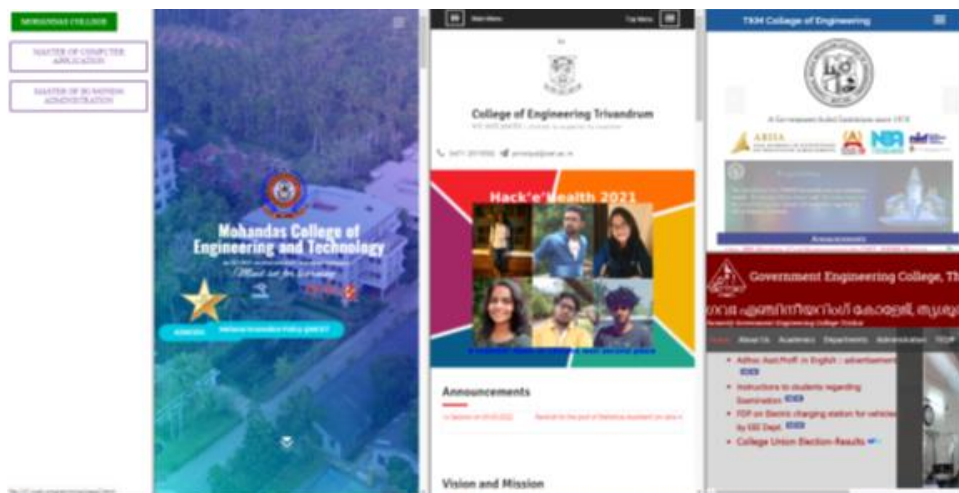
p{
padding:20px;
border: 2px solid red;
border-radius: 10px;
margin:70px;
width:210px;
}
ul {
list-style-type: none;
margin: 0;
padding: 0;
}
li{
display:inline;
}
a.active {
background-color: #04AA6D;
}

```

## RESULT

The program has been executed and the output is verified.

## OUTPUT







**Experiment no: 4**  
**Date: 25-11-2021**

## **INTERNAL, EXTERNAL AND INLINE CSS**

### **AIM**

To analyze CSS by applying the different styles using inline, external & internal style sheets in a HTML file.

### **SOURCE CODE**

#### **index.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Css-Ext-Int</title>
  <link rel="stylesheet" href="style.css">
  <style>
    .internal{
      color: blueviolet;
      font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
    }
  </style>
</head>
<body>
  <h1 style="color:orchid;">This is styled using inline CSS.</h1>
  <h1 class="internal">This is styled using internal CSS.</h1>
  <h1 id="external">This is styled using external CSS.</h1>
</body>
</html>
```

#### **style.css**

```
.external{
  background: magenta;
  font-family: 'Courier New', Courier, monospace;
}
```

### **RESULT**

The HTML file is executed and verified.

## OUTPUT

This is styled using inline CSS.

**This is styled using internal CSS.**

**This is styled using external CSS.**

**Experiment No : 5****Date: 01-12-2021****PREDEFINED FUNCTIONS - JAVASCRIPT STRING AND MATH OBJECT****AIM**

Create a HTML page to explain the use of various predefined functions in a string and math object in JavaScript.

**SOURCE CODE**

```

<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>String and Math functions</title>
</head>
<body>
  <div>
    <h2><center><u>FUNCTIONS IN STRING</u></center></h2>
    <center> ENTER THE FIRST STRING:
    <input type="text"
      id="str"><br> ENTER
      THE SECOND
      STRING:
    <input type="text" id="str2"><br>
    NUMBER OF TIMES THE STRING NEED TO BE REPEATED :
    <input type="num" id="repeat"><br>
    <input type="button" value="SUBMIT" onclick="string_func()"></center>
    <br><br>
    <ol id="output" type="1"> </ol>
  </div>
  <div>
    <h2><center><u>FUNCTIONS IN MATH</u></center></h2>
    <center>ENTER ANY NUMBER:<input type="text" id="num"><br>
    POWER TERM:
    <input type="text" id="pow"><br>
    <input type="button" value="SUBMIT" onclick="math_func()"></center>
    <br><br>
    <ol id="output_math" type="1"> </ol>
  </div>
</script>

```

```

function string_func() {
    let sentence = document.getElementById('str').value
    let anotherSentence=document.getElementById('str2').value
    let count = document.getElementById('repeat').value
    let li_O = '<li>';
    let li_C='</li>';
let list_items;

list_items = li_O + "String 1 in lowercase letters: "+sentence.toLowerCase()+li_C;
list_items += li_O + "String 1 in uppercase letters: "+sentence.toUpperCase()+li_C;
list_items += li_O + "Length of the String 1: "+sentence.length+

li_C; list_items += li_O + "Character at Position 4:

"+sentence.charAt(4)+ li_C;

list_items += li_O + "Repeat string 1 in "+count+" times: "+sentence.repeat(count)+ li_C;
list_items += li_O + "Last index position of the given String 1: "+sentence.charAt(4)+ li_C;

list_items += li_O + "Concatenates String 1 & String 2: "+sentence.concat('
',anotherSentence)+ li_C;

list_items += li_O + "String sliced from Position 3 to 6:"+sentence.slice(3,6)+ li_C;
    document.getElementById('output').innerHTML = (list_items);

}

function math_func() {

let number = document.getElementById('num').value; let power =
document.getElementById('pow').value; let li_O = '<li>';

let li_C = '</li>'; let list_items;

    list_items = li_O + 'Value of PI : ' + Math.PI + li_C;

    list_items += li_O + 'Round of '+number+' is : ' + Math.round(number) + li_C;

    list_items += li_O + "+number+' raise to '+power+' is : ' +
    Math.pow(number,power) + li_C; list_items += li_O + 'Square root of
'+number+' is : ' + Math.sqrt(number) + li_C;
    list_items += li_O + 'Floor value of '+number+' is : ' + Math.floor(number) + li_C;

    list_items += li_O + 'Sin value of '+number+' is : ' + Math.sin(number* Math.PI / 180)
+ li_C; list_items += li_O + 'Cos value of '+number+' is : ' + Math.cos(number*
Math.PI / 180) + li_C; list_items += li_O + 'A Random number is : ' + Math.random()
+ li_C;

    document.getElementById('output_math').innerHTML = (list_items);
}
</script>
</body>
</html>

```

## RESULT

The html file is executed and output is verified

## OUTPUT

### FUNCTIONS IN STRING

ENTER THE FIRST STRING:   
 ENTER THE SECOND STRING:   
 NUMBER OF TIMES THE STRING NEED TO BE REPEATED :

1. String 1 in lowercase letters: web
2. String 1 in uppercase letters: WEB
3. Length of the String 1: 3
4. Character at Position 4:
5. Repeat string 1 in 2 times: WEBWEB
6. Last index position of the given String 1:
7. Concatenates String 1 & String 2: WEB PROGRAMMING
8. String sliced from Position 3 to 6:

### FUNCTIONS IN MATH

ENTER ANY NUMBER:   
 POWER TERM:

1. Value of PI : 3.141592653589793
2. Round of 5 is : 5
3. 5 raise to 2 is : 25
4. Square root of 5 is : 2.23606797749979
5. Floor value of 5 is : 5
6. Sin value of 5 is : 0.08715574274765817
7. Cos value of 5 is : 0.9961946980917455
8. A Random number is : 0.3073819955186192

**Experiment No : 6****Date : 08-12-2021****SIGN UP FORM VALIDATION – JAVASCRIPT****AIM**

Create a HTML registration form and validate the form using JavaScript code.

**SOURCE CODE**

```

<html>
<head>
  <title>Form Validation</title>

  <script type="text/javascript">
    var divs = new Array();
    divs[0] = "errFirst";
    divs[1] = "errLast";
    divs[2] = "errEmail";
    divs[3] = "errUid";
    divs[4] = "errPassword";
    divs[5] = "errConfirm";
    function validate()
    {
      var inputs = new Array();
      inputs[0] = document.getElementById('first').value;
      inputs[1] = document.getElementById('last').value;
      inputs[2] = document.getElementById('email').value;
      inputs[3] = document.getElementById('uid').value;
      inputs[4] = document.getElementById('password').value;
      inputs[5] = document.getElementById('confirm').value;
      var errors = new Array();
      errors[0] = "<span style='color:red'>Please enter your first name!</span>";
      errors[1] = "<span style='color:red'>Please enter your last name!</span>";
      errors[2] = "<span style='color:red'>Please enter your email!</span>";
      errors[3] = "<span style='color:red'>Please enter your user id!</span>";
      errors[4] = "<span style='color:red'>Please enter your password!</span>";
      errors[5] = "<span style='color:red'>Please confirm your password!</span>";
      for (i in inputs)
      {
        var errMessage = errors[i];
        var div = divs[i];
        if (inputs[i] == "")
          document.getElementById(div).innerHTML = errMessage;
        else if (i==2)
        {
          var atpos=inputs[i].indexOf("@");
          var dotpos=inputs[i].lastIndexOf(".");

```

```

        if (atpos<1 || dotpos<atpos+2 || dotpos+2>=inputs[i].length)
            document.getElementById('errEmail').innerHTML = "<span style='color: red'>Enter
a valid email address!</span>";
        else
            document.getElementById(div).innerHTML = "OK!";
    }
    else if (i==5)
    {
        var first = document.getElementById('password').value;
        var second = document.getElementById('confirm').value;
        if (second != first)
            document.getElementById('errConfirm').innerHTML = "<span style='color:
red'>Your passwords don't match!</span>";
        else
            document.getElementById(div).innerHTML = "OK!";
    }
    else
        document.getElementById(div).innerHTML = "OK!";
    }
}
function finalValidate()
{
    var count = 0;
    for(i=0;i<6;i++)
    {
        var div = divs[i];
        if(document.getElementById(div).innerHTML == "OK!")
            count = count + 1;
    }
    if(count == 6)
        document.getElementById("errFinal").innerHTML = "All the data you entered is
correct!!!";
    }
</script>
</head>
<body>

```

```

    <h1>SIGN UP FORM</h1>
    <table id="table1">
        <tr>
            <td>First Name:</td>
            <td><input type="text" id="first" onkeyup="validate();" /></td>
            <td><div id="errFirst"></div></td>
        </tr>
        <tr>
            <td>Last Name:</td>
            <td><input type="text" id="last" onkeyup="validate();" /></td>
            <td><div id="errLast"></div></td>
        </tr>
        <tr>

```

```

        <td>Email:</td>
        <td><input type="text" id="email" onkeyup="validate();"/></td>
        <td><div id="errEmail"></div></td>
    </tr>
    <tr>
        <td>User Id:</td>
        <td><input type="text" id="uid" onkeyup="validate();"/></td>
        <td><div id="errUid"></div></td>
    </tr>
    <tr>
        <td>Password:</td>
        <td><input type="password" id="password" onkeyup="validate();"/></td>
        <td><div id="errPassword"></div></td>
    </tr>
    <tr>
        <td>Confirm Password:</td>
        <td><input type="password" id="confirm" onkeyup="validate();"/></td>
        <td><div id="errConfirm"></div></td>
    </tr>
    <tr>
        <td><input type="button" id="create" value="Create"
onclick="validate();finalValidate();"/></td>
        <td><div id="errFinal"></div></td>
    </tr>
</table>

</body>
</html>

```

## RESULT

The program file has been executed and the output is verified.



**OUTPUT****SIGN UP FORM**

First Name:	<input type="text" value="Johnny"/>	OK!
Last Name:	<input type="text"/>	Please enter your last name!
Email:	<input type="text"/>	Please enter your email!
User Id:	<input type="text"/>	Please enter your user id!
Password:	<input type="password"/>	Please enter your password!
Confirm Password:	<input type="password"/>	Please confirm your password!
<input type="button" value="Create"/>		

**SIGN UP FORM**

First Name:	<input type="text" value="Johnny"/>	OK!
Last Name:	<input type="text" value="Depp"/>	OK!
Email:	<input type="text" value="admin@johnny-depp.org"/>	OK!
User Id:	<input type="text" value="999"/>	OK!
Password:	<input type="password" value="..."/>	OK!
Confirm Password:	<input type="password" value="•"/>	Your passwords don't match!
<input type="button" value="Create"/>		

**SIGN UP FORM**

First Name:	<input type="text" value="Johnny"/>	OK!
Last Name:	<input type="text" value="Depp"/>	OK!
Email:	<input type="text" value="admin@johnny-depp.org"/>	OK!
User Id:	<input type="text" value="999"/>	OK!
Password:	<input type="password" value="..."/>	OK!
Confirm Password:	<input type="password" value="..."/>	OK!
<input type="button" value="Create"/>		

# SIGN UP FORM

First Name:	<input type="text" value="Johnny"/>	OK!
Last Name:	<input type="text" value="Depp"/>	OK!
Email:	<input type="text" value="admin@johnny-depp.org"/>	OK!
User Id:	<input type="text" value="999"/>	OK!
Password:	<input type="password" value="..."/>	OK!
Confirm Password:	<input type="password" value="..."/>	OK!
<input type="button" value="Create"/>	All the data you entered is correct!!!	

**Experiment No : 7**  
**Date : 9-12-2021**

## **JAVASCRIPT EVENT HANDLING**

### **AIM**

To create a HTML page to change the background color for every click of a button using JavaScript event handling.

### **SOURCE CODE**

#### **index.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <button id="btn">Click Me</button>
  <script>
    let array1=['#00ff00','#990000','#ff0000','#ff7373','#00ffff',
'#bada55','#800000','#800080','#2d3436','#fd79a8','#00cec9','#00b894','#fab1a0','#ffeaa7'];
    console.log("sucess");

    let i=0;
    document.getElementById('btn').addEventListener("click",
    function(){
      i=i; i < array1.length ? ++i : 0;
      document.body.style.background=array1[i];
    })
  </script>
</body>
</html>
```

#### **style.css**

```
body{
  margin:0;
  padding: 0;
  box-sizing: border-box;
  background:#b2bec3;
  font-family: sans-serif;
  display: flex;
  align-items: center;
```

```
justify-content: center;
min-height: 100vh;
}

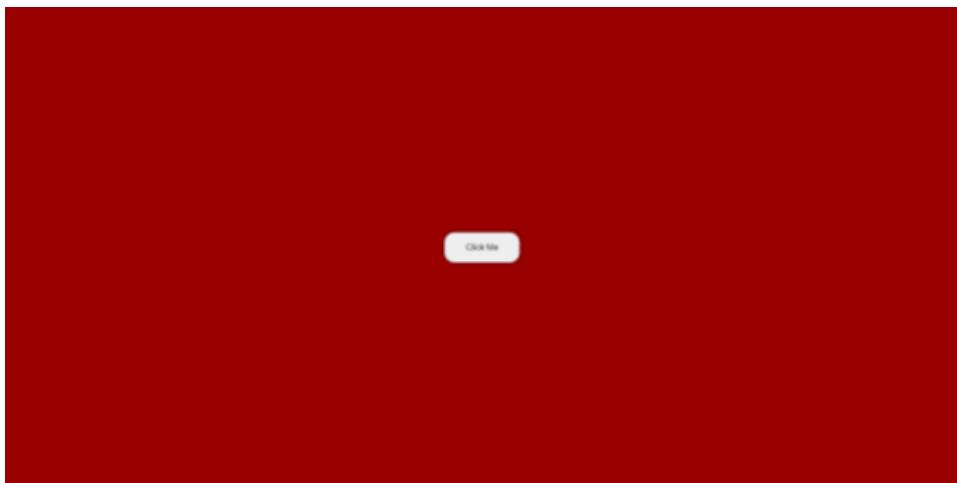
button{
width: 150px;
height: 60px;
border-radius: 20px;
background: #eee;
border: none;
outline: none;
font-size: 17px;
transition: 0.5s;
transition: 0.5s;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.5);
}

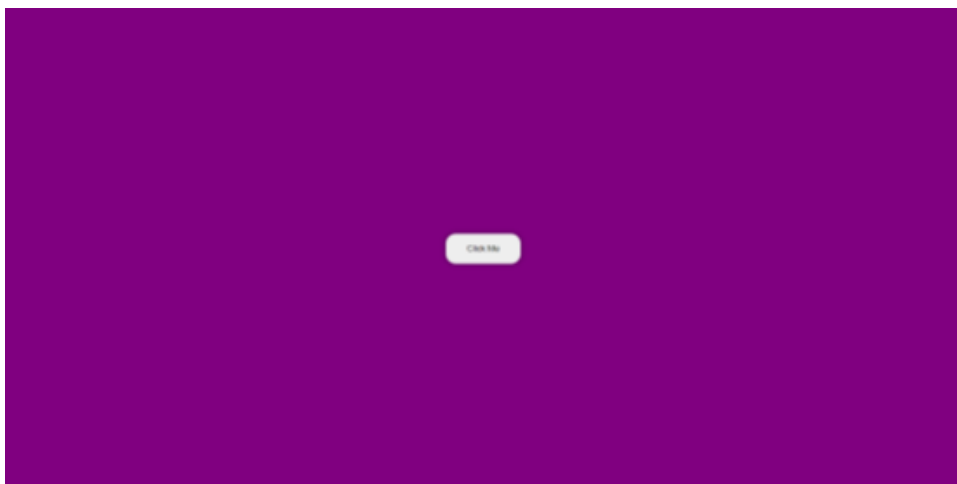
button:hover{
background:#03a1ff;
color:#fff;
border-radius: 20px;
box-shadow: none;
}
```

## RESULT

This HTML file has been executed and the output is verified.

## OUTPUT





**Experiment No : 8**  
**Date : 15-12-2021**

## ELECTRICITY BILL

### AIM

To Compose an electricity bill from user input based on given tariff using PHP.

### SOURCE CODE

```
<head>
<title>PHP - Calculate Electricity Bill</title>
</head>

<?php
$result_str = $result = "";
if (isset($_POST['unit-submit'])) {
    $units = $_POST['units'];
    if (!empty($units)) {
        $result = calculate_bill($units);
        $result_str = 'Total amount of ' . $units . ' - ' . $result;
    }
}

function calculate_bill($units) {
    $unit_cost_first = 3.50;
    $unit_cost_second = 4.00;
    $unit_cost_third = 5.20;
    $unit_cost_fourth = 6.50;

    if($units <= 50) {
        $bill = $units * $unit_cost_first;
    }
    else if($units > 50 && $units <= 100) {
        $temp = 50 * $unit_cost_first;
        $remaining_units = $units - 50;
        $bill = $temp + ($remaining_units * $unit_cost_second);
    }
    else if($units > 100 && $units <= 200) {
        $temp = (50 * 3.5) + (100 * $unit_cost_second);
        $remaining_units = $units - 150;
        $bill = $temp + ($remaining_units * $unit_cost_third);
    }
    else {
        $temp = (50 * 3.5) + (100 * $unit_cost_second) + (100 * $unit_cost_third);
        $remaining_units = $units - 250;
        $bill = $temp + ($remaining_units * $unit_cost_fourth);
    }
    return number_format((float)$bill, 2, '.', '');
}
```

```
?>

<body bgcolor="grey">
<div id="page-wrap">
<h1>Calculate Electricity Bill</h1>

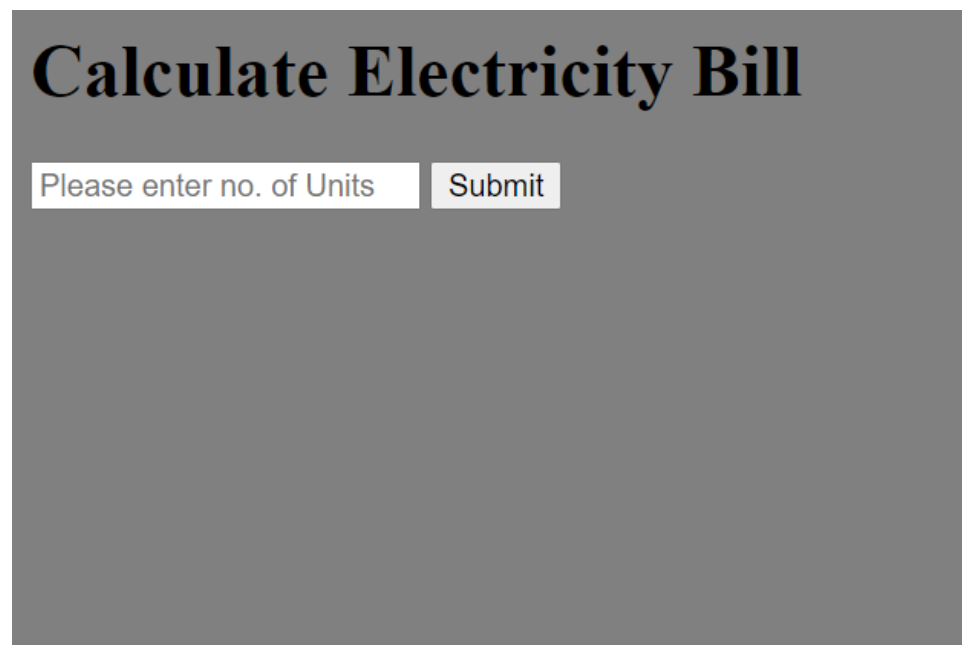
<form action="" method="post" id="quiz-form">
  <input type="number" name="units" id="units" placeholder="Please enter no. of Units" />
  <input type="submit" name="unit-submit" id="unit-submit" value="Submit" />
</form>

<div>
  <?php echo '<br />' . $result_str; ?>
</div>
</div>
</body>
</html>
```

## RESULT

The program has been executed and the output is verified.

## OUTPUT



The screenshot displays a web page with a dark grey background. At the top, the title "Calculate Electricity Bill" is centered in a large, bold, black serif font. Below the title, there is a form consisting of a white text input field with the placeholder text "Please enter no. of Units" and a white "Submit" button to its right. The rest of the page is empty.

# Calculate Electricity Bill

Please enter no. of Units

Submit

Total amount of 25 - 87.50



**Experiment No : 9**  
**Date : 21-12-2021**

## **BOOK DETAILS**

### **AIM**

Develop a web application using PHP to store the book details and view book details.

### **SOURCE CODE**

#### **conn.php**

```
<?php
$servername='localhost';
$username='root';
$password="";
$dbname = "library";
$conn=mysqli_connect($servername,$username,$password,$dbname);
if(!$conn){
    die('Could not Connect My Sql:' .mysql_error());
}
else
{
    echo "Database connected";
}
?>
```

#### **main.html**

```
<html>
<head>
<title>Homepage</title>
</head>
<body bgcolor="lightblue">
<center><br><br>
<b> Library </b><br><br>

<form method="post" action="insert.html">
<input type="submit" value="Add Book" name="submit">
</form>

<form method="post" action="view.php">
<input type="submit" value="view " name="submit">
</form>

</center>
</body>
```

```
</html>
```

### **insert.php**

```
<html>
<body bgcolor="Yellowgreen">
<form action="main.html" method="post">
<center>
<br>
<br>
<?php
include_once 'conn.php';
if(isset($_POST['submit']))
{
    $bookid=$_POST['id'];
    $title = $_POST['title'];
    $author=$_POST['author'];
    $publisher = $_POST['pub'];
    $price=$_POST['price'];
    $quantity = $_POST['qty'];
    $sql = "INSERT INTO library (bid,title,author,pname,price,quantity)
VALUES ('$bookid','$title','$author','$publisher','$price','$quantity')";

    if (mysqli_query($conn, $sql)) {
        echo "<br>New Book added !<br>";
    }
    else
    {
        echo "Error: " . $sql . " " . mysqli_error($conn);
    }
    mysqli_close($conn);
}

?>
<br><br><input type="submit" value="Back to home page"name="submit">
</center>
</body>
</html>
```

### **insert.html**

```
<html>
<head>
    <title>Add details</title>
</head>
<body bgcolor="cyan">
    <form method="post"action="insert.php">
```

```

<center><br><br>
<b>Add book details<b><br><br>
<table>
  <tr>
    <td> Bookid:</td>
    <td><input type="text" name="id"></td>
  </tr>
  <tr>
    <td>Title :</td>
    <td><input type="text" name="title"></td>
  </tr>
  <tr>
    <td>Author:</td>
    <td><input type="text" name="author"></td>
  </tr>
  <tr>
    <td>Publisher :</td>
    <td><input type="text" name="pub"></td>
  </tr>
  <tr>
    <td>Price:</td>
    <td><input type="text" name="price"></td>
  </tr>
  <td>Quantity:</td>
  <td><input type="text" name="qty"></td>
</tr>

  <tr>
    <td><input type="submit" value="submit" name="submit"></td>
  </tr>
</table>
</form>
</body>
</html>

```

### view.php

```

<html>
<head>
<title>"View Book"</title>
</head>
<body bgcolor="Lightpink">
<form action="main.html" method="post">
<center>
<?php
include_once 'conn.php';

```

```

$sql = "SELECT * FROM library";
$result=mysqli_query($conn,$sql);
if (mysqli_num_rows($result) > 0)
{
?>
<br><br>
<table border="2">
<tr>
<th>Book Id</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Price</th>
<th>Quantity</th>
</tr>
<?php
$i=0;
while($row = mysqli_fetch_assoc($result)) {
?>
<tr>
<td><?php echo $row["bid"]; ?></td>
<td><?php echo $row["title"]; ?></td>
<td><?php echo $row["author"]; ?></td>
<td><?php echo $row["pname"]; ?></td>

<td><?php echo $row["price"]; ?></td>
<td><?php echo $row["quantity"]; ?></td>
</tr>
<?php
$i++;
}
?>
</table>

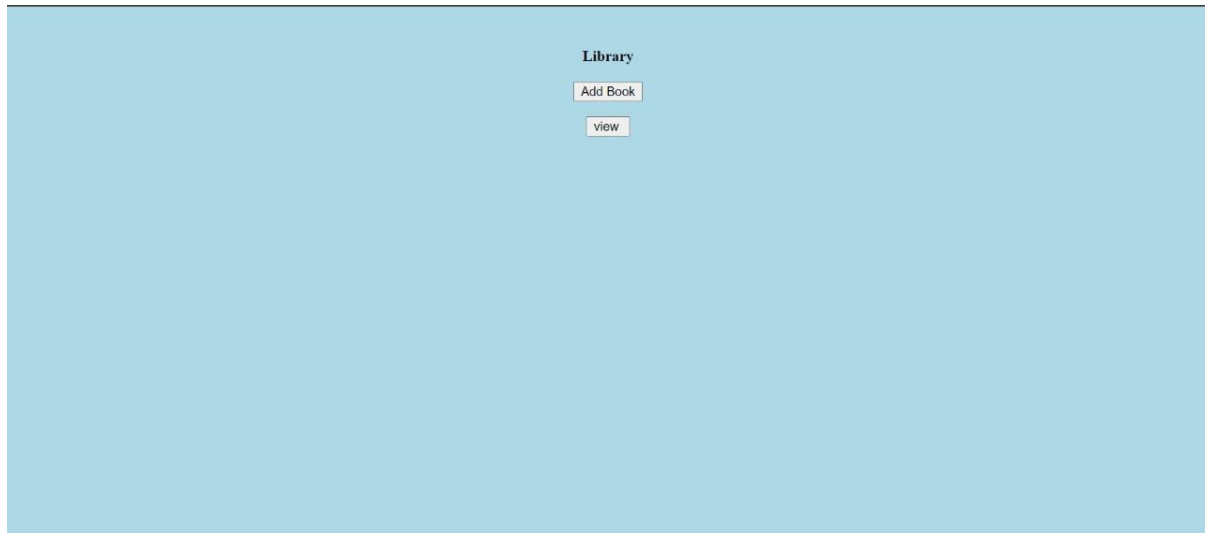
<?php
}
else{
    echo "No result found";}
?>
<br>
<br>
<input type="submit" value="Back to home page"name="submit">
</center>
</form>
</body>
</html>

```

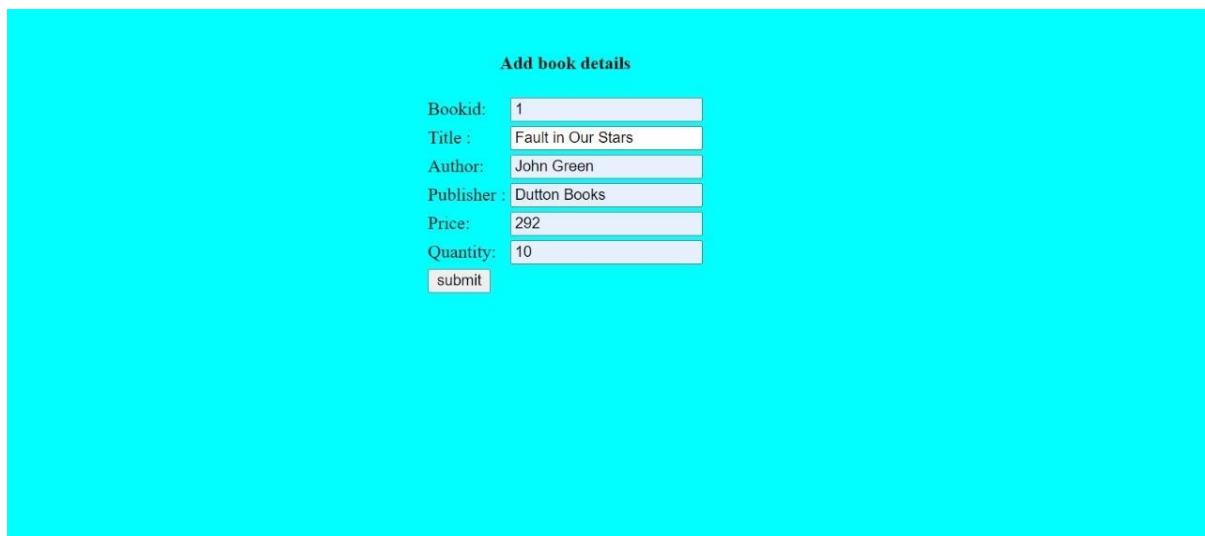
## RESULT

The program has been executed and the output is verified.

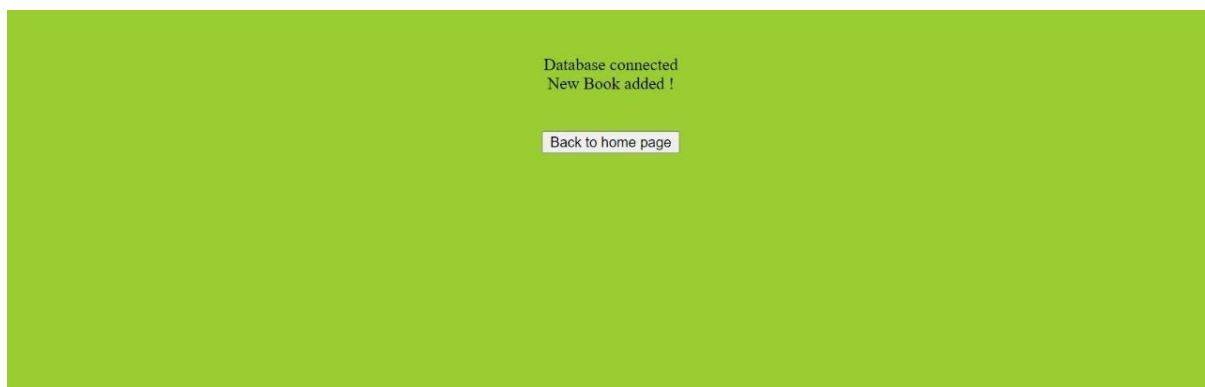
## OUTPUT



A screenshot of a web application interface with a light blue background. At the top center, the word "Library" is displayed in a bold, black font. Below it, there are two buttons: "Add Book" and "view", both with a light pink background and black text.



A screenshot of a web application interface with a bright cyan background. At the top center, the text "Add book details" is displayed in a bold, black font. Below it, there is a form with several input fields and a submit button. The fields are labeled "Bookid:", "Title :", "Author:", "Publisher :", "Price:", and "Quantity:". The values entered in the fields are "1", "Fault in Our Stars", "John Green", "Dutton Books", "292", and "10" respectively. A "submit" button is located at the bottom of the form.



A screenshot of a web application interface with a solid green background. At the top center, the text "Database connected" and "New Book added !" is displayed in a black font. Below it, there is a button labeled "Back to home page" with a light green background and black text.

Database connected

Book Id	Title	Author	Publisher	Price	Quantity
1	Fault in our stars	John Green	Dutton Books	292	10

[Back to home page](#)

**Experiment No : 10**  
**Date : 12-01-2022**

## ONLINE EXAM

### AIM

Create a HTML page to show online exam using JavaScript.

### SOURCE CODE

#### quiz.html

```
<html>
<head>
<title>Quiz</title>
<link rel="stylesheet" type="text/css" href="quiz.css">
</head>
<body>
  <div class="card">
    <form>
      <h1 id="quizhead">Online Quiz</h1>
      <hr>
      <div id="ques">
        <b>1.The nucleus of an atom consists of</b>
      </div>

      <div id="option">

        <input type="radio" name="q1" id="q11">

        <label for="q11">electrons and neutrons</label><br>
        <input type="radio" name="q1" id="q12">
        <label for="q12">electrons and protons</label><br>
        <input type="radio" name="q1" id="q13">
        <label for="q13">protons and neutrons</label><br>
        <input type="radio" name="q1" id="q14">
        <label for="q14">None of these</label><br>
      </div>
      <div id="ques">
        <b>The most electronegative element among the following is</b>
      </div>
      <div id="option">
        <input type="radio" name="q2" id="q21">
        <label for="q21">sodium</label><br>
        <input type="radio" name="q2" id="q22">
        <label for="q22">bromine</label><br>
        <input type="radio" name="q2" id="q23">
        <label for="q23">fluorine</label><br>
        <input type="radio" name="q2" id="q24">
        <label for="q24">oxygen</label><br>
      </div>
    </form>
  </div>
</body>
</html>
```

```

</div>
<div id="ques">
  <b>3. The metal used to recover copper from a solution of copper sulphate is </b>
</div>
<div id="option">
  <input type="radio" name="q3" id="q31">
  <label for="q31">Na</label><br>
  <input type="radio" name="q3" id="q32">
  <label for="q32">Ag</label><br>
  <input type="radio" name="q3" id="q33">
  <label for="q33">Hg</label><br>
  <input type="radio" name="q3" id="q34">
  <label for="q34">Fe</label><br>
</div>
</div>
<div class="btnbox">
<button id="btn" onclick="result()">Submit</button>
<input type="reset" value="Reset" id="btn" class="btnrest">
</div>
</form>
<script src="quiz.js"></script>
</body>
</html>

```

### quiz.css

```

*{
  margin: 0;
  padding: 0;
}

.card{
  width: 60%;
  height: 450px;
  background-color: #e4e7ed;
  margin-left: 20%;
  margin-top: 3%;
}

.btnbox{
  width: 60%;
  margin-left: 28%;
  margin-top: 1%;
}

#quizhead{
  text-align: center;
  padding-top: 3%;
  color:#2942c2;
}

```



```
#ques{
  padding-left: 5%;
  padding-top: 2%;
  color: #021c4f;
}

#option{
  padding-left: 8%;
  padding-top: 1%;
  color:#2c416b;
}

hr{
  border: 1px dashed #87a9ed;
  margin-top: 1%;
}
```

```
#btn{
  width: 30%;
  padding: 10px 24px;
  cursor: pointer;
  margin-left: 2%;
  background:#dae8f7;
  border: none;
  color:#2942c2; }
```

```
#btn:hover{
  background:#add0f7;
  color: #041d38;
}
```

### **quiz.js**

```
function result(){
  let score=0
  if(document.getElementById('q13').checked){
    score+=1
  }
  if(document.getElementById('q22').checked){
    score+=1 }
  if(document.getElementById('q31').checked){
    score+=1
  }
  alert("You've completed the Quiz!" + "\n" + "Your score: "+score+" of 3")
}
```

## RESULT

The program has been executed and the output is verified.

## OUTPUT

### Online Quiz

**1.The nucleus of an atom consists of**

☐ electrons and neutrons  
☒ electrons and protons  
☐ protons and neutrons  
☐ None of these

**The most electronegative element among the following is**

☐ sodium  
☒ bromine  
☐ fluorine  
☐ oxygen

**3. The metal used to recover copper from a solution of copper sulphate is**

☐ Na  
☒ Ag  
☐ Hg  
☐ Fe

Submit Reset

This page says

You've completed the Quiz!  
Your score: 1 of 3

OK

**1.The nucleus of an atom consists of**

☐ electrons and neutrons  
☒ electrons and protons  
☐ protons and neutrons  
☐ None of these

**The most electronegative element among the following is**

☐ sodium  
☒ bromine  
☐ fluorine  
☐ oxygen

**3. The metal used to recover copper from a solution of copper sulphate is**

☐ Na  
☒ Ag  
☐ Hg  
☐ Fe

Submit Reset

**Experiment No : 11**  
**Date : 19-01-2022**

## **REGISTRATION FORM VALIDATION - PHP**

### **AIM**

To Develop a registration form using PHP and do necessary validations.

### **SOURCE CODE**

#### **form.php**

```
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Validation</title>
</head>
<style>
  table{
    background-color: white;
    margin-left: auto;
    margin-right: auto;
    margin-top: 1em;
    padding: 1em;
    box-shadow: 0 4px 10px 0 rgba(0,0,0,0.2), 0 4px 20px 0 rgba(0,0,0,0.19);
  }
  tr,td,th{
    padding: 1em;
    text-align: left;
  }
  .center th{
    text-align: center;
  }
  h2{
    text-align: center;
    margin-top: 2em;
    background-color: black;
    color: white;
  }
</style>
<body>
  <h2>FORM VALIDATION</h2>
  <form name="form" action="#" method="POST">
    <table>
      <tr>
        <th>Name</th>
        <td><input type="text" name="fname"> </td>
```

```

        </tr>
        <tr>
            <th>Email</th>
            <td><input type="email" name="email"> </td>
        </tr>
        <tr>
            <th>Mob NO </th>
            <td><input type="tel" name="mob"> </td>
        </tr>
        <tr>
            <th>Username </th>
            <td><input type="text" name="user"> </td>
        </tr>
        <tr>
            <th>Password </th>
            <td><input type="password" name="password"> </td>
        </tr>
        <tr class="center">
            <th colspan="2"><input type="submit" value="submit" name="submit"></th>
        </tr>
    </table>
</form>
<?php
    $con = Mysqli_Connect("localhost","root","", "form");

    if(isset($_POST['submit'])){
        $name = $_POST['fname'];
        $email = $_POST['email'];
        $mobile = $_POST['mob'];
        $user = $_POST['user'];
        $password = $_POST['password'];

        if($_POST['fname'] == ""){
            echo "<script>alert('Enter First Name !!')</script>";
        }
        else if(!preg_match("/^[a-zA-Z ]*$/", $name)){
            echo "<script>alert('Enter Your Name !!')</script>";
        }
        else if($_POST['email'] == ""){
            echo "<script>alert('Enter Email !!')</script>";
        }
        else if(!preg_match('/^[0-9]{10}+$/', $_POST['mob'])){
            echo "<script>alert('Enter Valid Mobile Number !!')</script>";
        }
        else if($_POST['user'] == ""){
            echo "<script>alert('Enter User Name !!')</script>";
        }
        else if($_POST['password'] == ""){
            echo "<script>alert('Enter Password !!')</script>";
        }
    }

```

```

        else if (strlen($_POST["password"]) < 8) {
            echo "<script>alert('Your Password Must Contain At Least 8
Characters!')</script>";
        }
        else if(!preg_match("#[0-9]+#", $password)) {
            echo "<script>alert('Your Password Must Contain At Least 1 Number!')</script>";
        }
        else if(!preg_match("#[A-Z]+#", $password)) {
            echo "<script>alert('Your Password Must Contain At Least 1 Capital
Letter!')</script>";
        }
        else if(!preg_match("#[a-z]+#", $password)) {
            echo "<script>alert('Your Password Must Contain At Least 1 Lowercase
Letter!')</script>";
        }
        else{

            $query = "insert into form values('$name','$email','$mobile','$password','$user')";
            if(mysqli_query($con,$query)){
                echo "success";
            }
            else{
                echo "error".mysqli_error($con);
            }
        }
    }
}
?>

</body>
</html>

```

## RESULT

The program has been executed and the output is verified.

## OUTPUT

### FORM VALIDATION

Name	<input type="text" value="Johnny Depp"/>
Email	<input type="text" value="johnydepp@gmail.com"/>
Mob NO	<input type="text" value="9870796889"/>
Username	<input type="text" value="jdepp"/>
Password	<input type="password" value="*****"/>
<input type="button" value="submit"/>	

localhost says

Your Password Must Contain At Least 8 Characters!

OK

### FORM VALIDATION

Name	<input type="text"/>
Email	<input type="text"/>
Mob NO	<input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
<input type="button" value="submit"/>	

success

**Experiment No : 12**  
**Date : 02-02-2022**

## **ASORT & ARSORT FUNCTIONS**

### **AIM**

PHP code to store name of students in an array and display it using print\_r function. Sort and Display the same using asort & arsort functions.

### **SOURCE CODE**

#### **asort.php**

```
<?php

$students = array("Joey Tribbiani", "Rachel Green", "Monica Gellerr", "Chandler Bing",
"Phoebe Buffay", "Ross Geller", "Janice Hosenstein");
echo "<b>Normal Array : </b><br>";
print_r($students);
echo "<br><br> <b>Ascending Sort : </b><br>";
asort($students);
print_r($students);
echo "<br><br> <b>Descending Sort : </b><br>";
arsort($students);
print_r($students);

?>
```

### **RESULT**

The program has been executed and the output is verified.

## OUTPUT

### Normal Array :

Array ( [0] => Ross [1] => Rachel [2] => Monica [3] => Phoebe [4] => Chandler [5] => Joey [6] => Janice [7] => Gunther )

### Ascending Sort :

Array ( [4] => Chandler [7] => Gunther [6] => Janice [5] => Joey [2] => Monica [3] => Phoebe [1] => Rachel [0] => Ross )

### Descending Sort :

Array ( [0] => Ross [1] => Rachel [3] => Phoebe [2] => Monica [5] => Joey [6] => Janice [7] => Gunther [4] => Chandler )



**Experiment No : 13**  
**Date : 02-02-2022**

## **CRICKET PLAYER'S LIST**

### **AIM**

PHP code to store name of Indian Cricket players in an array and display the same in HTML table.

### **SOURCE CODE**

#### **player.html**

```
<html>
<body>
<form action="cricket-player.php" method="post">
  <h3>Enter the name of cricket Player</h3>
  <textarea name="players" rows="10" cols="50"
placeholder="Eg:Sachin,Dhoni"></textarea><br>
  <input type="submit">
</form>
</body>
</html>
```

#### **cricket-player.html**

```
<?php
$names = $_POST['players'];
$players = explode(",",$names);
echo "<table border='1'>";
echo "<tr><th>Players</th></tr>";
for($i=0;$i<count($players);$i++)
{
  echo "<tr><td>".$players[$i]."</td></tr>";
}
echo "</table>";
?>
```

### **RESULT**

The program has been executed and the output is verified.

**OUTPUT**

**Enter the name of cricket Player**

Sachin, Virat, Dhoni, Sanju

Submit

**Enter the name of cricket Player**

Sachin, Virat, Dhoni, Sanju

Submit