# FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)™

**HORMIS NAGAR, MOOKKANNOOR, ANGAMALY-683577**


**FOCUS ON EXCELLENCE**

## 20MCA133 WEB PROGRAMMING LAB

## LABORATORY RECORD

**Name: DHANIK DINTO**

**Branch: MASTER OF COMPUTER APPLICATIONS**

**Semester: 1 Batch: A Roll No: 52**

**University Registration Number: FIT21MCA-2052**

**MARCH 2022**

# FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)™

**HORMIS NAGAR, MOOKKANNOOR, ANGAMALY-683577**

**FOCUS ON EXCELLENCE**

## CERTIFICATE

*This is to certify that this is a Bonafide record of the Practical work done by* ***DHANIK DINTO (FIT21MCA-2052)*** *in the* ***20MCA133 WEB PROGRAMMING LAB*** *Laboratory towards the partial fulfilment for the award of the Master Of Computer Applications during the academic year 2021-2022.*

Signature of Staff in Charge

Name:

Signature of H O D

Name:

**Date of University practical examination ……**

Signature of
Internal Examiner

Signature of
External Examiner

| | | | | | |
|---|---|---|---|---|---|
| **11** | **10/01/2022** | Build a 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. | **48** | | |
| **12** | **10/01/2022** | Build a PHP code to store name of Indian Cricket players in an array and display the same in HTML table. | **49** | | |
| **13** | **17/01/2022** | Using PHP and MySQL, develop a program to accept book information viz.Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings | **51** | | |
| **14** | **17/01/2022** | Using PHP and MySQL, develop a program to collect airline details and display all the airlines between a particular source and destination. | **57** | | |

**Experiment No.: 1**

**Aim**: Create a simple html file to demonstrate the use of different tags.

**Source code**

```
<html>
<head>
<title>ERNAKULAM</title>
</head>
<body bgcolor="black" text="white">
<hr><center><h1>ERNAKULAM</h1></center></hr><br><br>
<a href="COCHIN.JPEG">
<img src= "COCHIN.JPEG" align="right" height="300" width="300"></a>
<small><h3>Ernakulam is the central portion of the city of Kochi in Kerala, India and has
lent its name to the Ernakulam district. Many major establishments, including the Kerala
High Court, the office of the Kochi Municipal Corporation are situated here. Ernakulam,
which is where a huge part of the commercial activity in Kochi city happen, is known as the
commercial capital of Kerala. The Ernakulam Junction is a major railway station of the
Indian Railways, and the busiest railway station in Kochi city, the 2nd busiest in
Thiruvananthapuram railway division and the 5th busiest in Southern Railways.
Initially, Ernakulam was the headquarters of the Ernakulam District but was later shifted to
Kakkanad, an eastern region in Kochi. Ernakulam was once the capital of the Kingdom of
Cochin. It is located 220 kilometres (137 mi) north - west of the state capital
Thiruvananthapuram. The city has served as an incubator for many Malayali
entrepreneurs and is a major financial and commercial hub of Kerala. The Kochi Metro's
first phase runs through Ernakulam region as well. The second phase aims to connect the
```

CBD with the IT hub of Kakkanad.

The state government and the GCDA have had plans in the past to include Angamaly, Perumbavoor, Piravom and Kolenchery in the Ernakulam district; Mala and Kodungallur in

the Thrissur district; Thalayolaparambu and Vaikom in Kottayam; and Cherthala in the

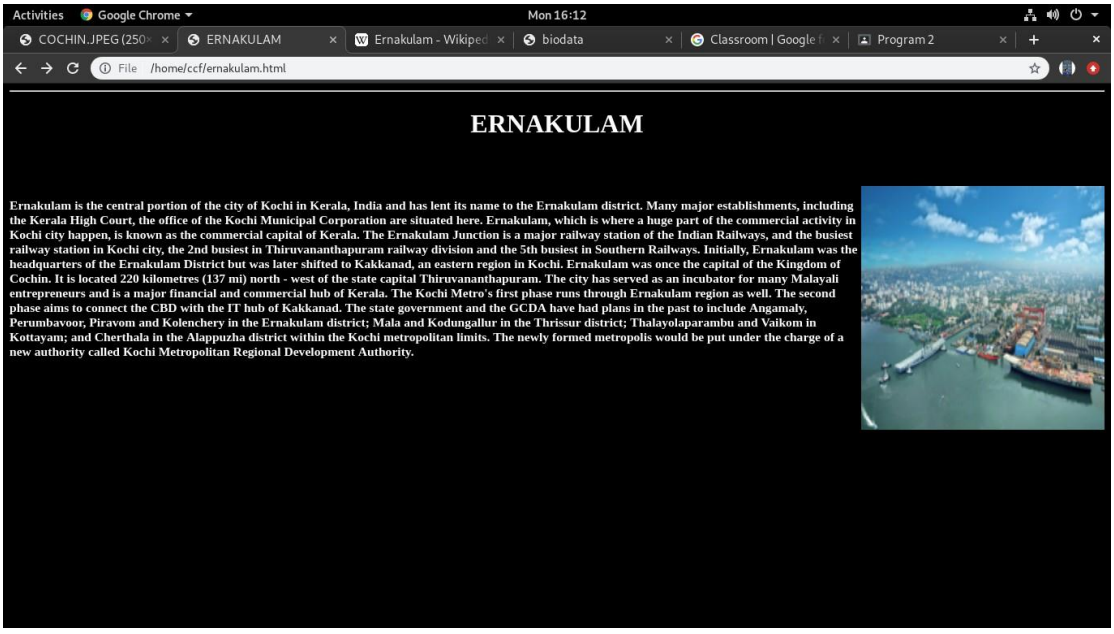
Alappuzha district within the Kochi metropolitan limits. The newly formed metropolis would

be put under the charge of a new authority called Kochi Metropolitan Regional Development Authority.</h3>

</body>

</html>

**Output**



**Experiment No.: 2**

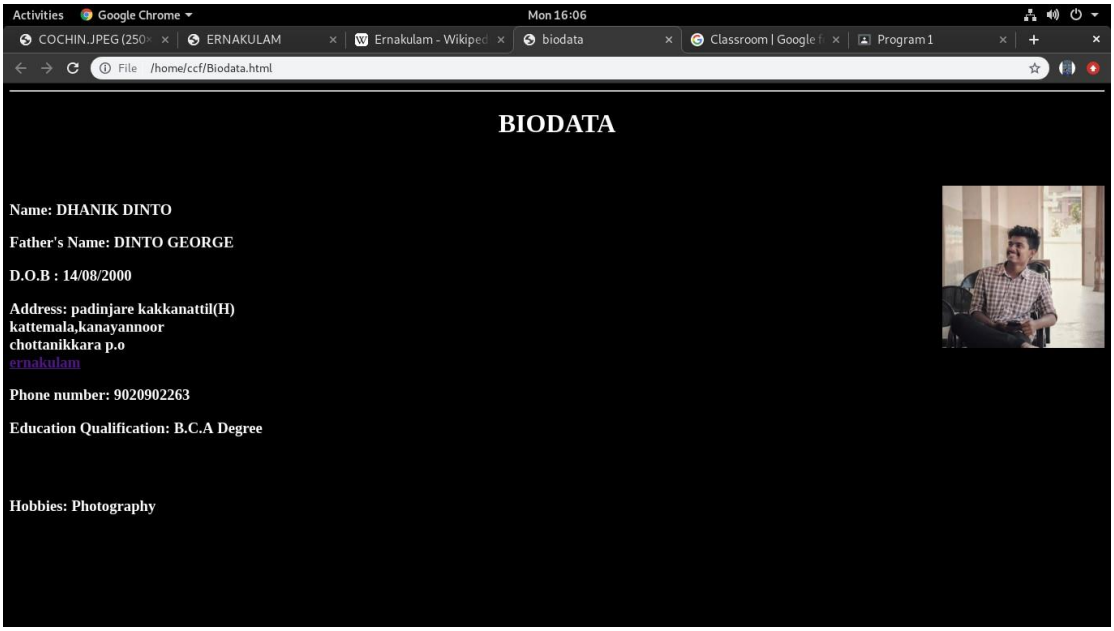
**Aim**: Create your bio data by using the html tags for hyperlinks, images, table, frame and fonts. Make it attractive by using the various color elements. The design should contain a minimum of 3 hyperlinks

**Source code**

Biodata.html

```
<html>
<head>
<title>biodata</title>
</head>
<body bgcolor="black" text="white">
<hr><center><h1>BIODATA</h1></center></hr><br><br>
<img src= "njan.jpeg" align="right" height="200" width="200">
<table align="center" size="7">
<h3>Name: DHANIK DINTO</h3>
<h3>Father's Name: DINTO GEORGE</h3>
<h3>D.O.B : 14/08/2000</H3> <h3>Address:  padinjare kakkanattil(H)<br>
kattemala,kanayannoor<br> chottanikkara p.o<br>
<a href="ernakulam.html">ernakulam</a></h3>
<h3>Phone number: 9020902263</h3>
<h3>Education Qualification: B.C.A Degree</h5><br><br>
<h3>Hobbies: Photography</h3>
</table>
</body> </html>
```

## Output


Activities
Google Chrome
Mon 16:06
COCHIN.JPEG (250
ERNAKULAM
Ernakulam - Wikiped
biodata
Classroom | Google
Program 1
File /home/ccf/Biodata.html
BIODATA
Name: DHANIK DINTO
Father's Name: DINTO GEORGE
D.O.B : 14/08/2000
Address: padinjare kakkanattil(H)
kattemala,kanayannoor
chottanikkara p.o
ernakulam
Phone number: 9020902263
Education Qualification: B.C.A Degree
Hobbies: Photography

**Experiment No.: 3**

**Aim:** Create an application form for MCA course in FISAT.

**Source code**

```
<html>
<head>
<title>Application for admission to Master of Computer Applications </title>
<style> label{ display: inline-block;
float: left; clear: left; width: 250px; text-align: left; /*Change to right here if you want it close to the inputs*/
} input { display: inline-block;
float: left; }
.myDiv { background-color: #BE0D02;
font-size: large;
font-family: sans-serif;
}
.herDiv { background-color: ##fff3c9;
font-size: large;
font-family: sans-serif;
}
</style>
</head>
<body bgcolor=#f5f5f5>
<div class="myDiv">
<center>
<img  src="federal.png" width=150 alt=image>
<img  src="logo_main.png" width=600 alt=image>
</center>
<br>
<br>
</div>
<br>
```

```
<div class="herDiv">
<center><h2>REGISTER FORM</center></h2>
<center><h4>MCA</center></h4>
<body font="Times new roman" color="black" bgcolor="white">
<h1 align="center">MCA APPLICATION FORM</h1>
<hr align="center" width="50%"></br></br></br></br>
<form>
<center>
<table border="1">
<tr>
<th colspan="2">
<b>Basic Details</b>
</th>
</tr>
<tr>
<td>Name</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Address</td>
<td><textarea size=80 rows="5" cols="29"></textarea></td>
</tr>
<tr>
<td>Contact Number</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Email</td>
<td><input type="email" maxlength="100" size="30" required>
</tr>
<tr>
<td>Date of Birth</td>
```

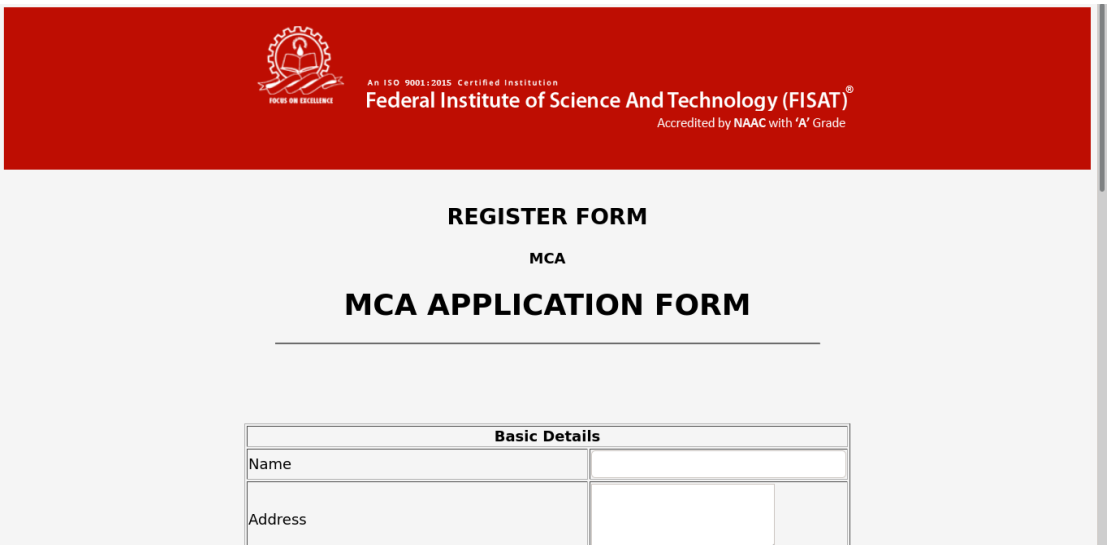
```
<td><input type="date"></td>
</tr>
<tr>
<td>Gender</td>
<td>
Male
<input type="radio"><br>
Female
<input type="radio"><br>
Others
<input type="radio"><br>
Prefer not to say
<input type="radio"><br>
</td>
<tr>
<td>Nationality</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Religion</td>
<td><select name="religion" size="1" required>
<option disabled selected value> -- select an option -- </option>
<option value="Hindu">Hindu</option>
<option value="Christian">Christian</option>
<option value="Muslim">Muslim</option>
<option value="Others">Others</option>
</select>
</tr>
<tr>
<td>Father's Name</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
```

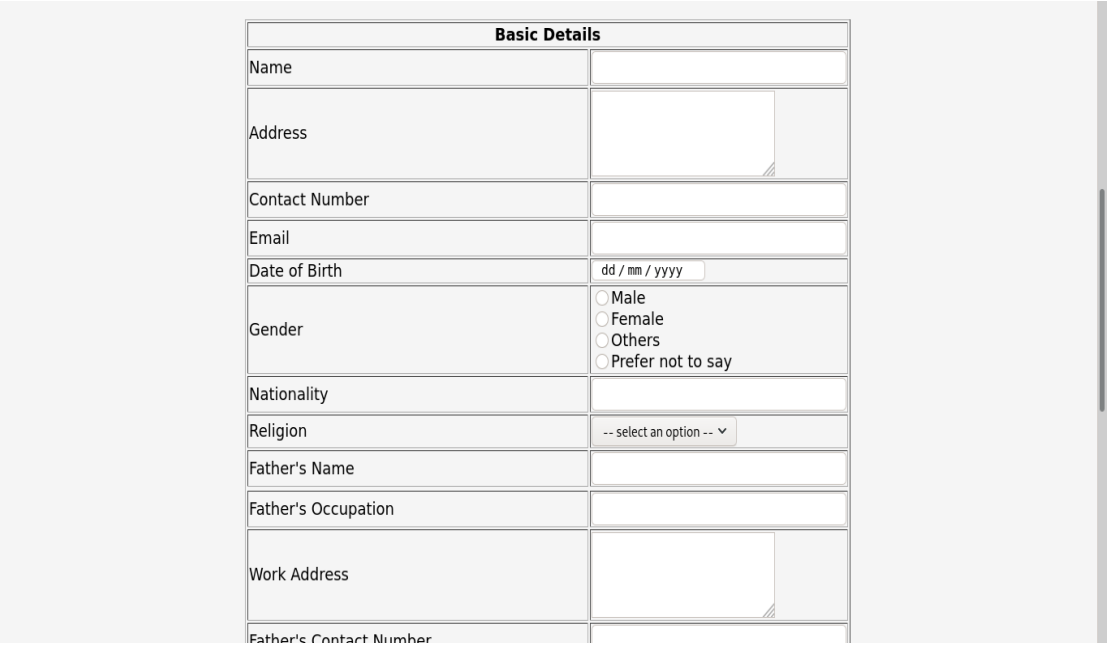
```
<tr>
<tr>
<td>Father's Occupation</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Work Address</td>
<td><textarea size=80 rows="5" cols="29"></textarea></td>
</tr>
<td>Father's Contact Number</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<td>Mother's Name</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Mother's Occupation</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Work Address</td>
<td><textarea size=80 rows="5" cols="29"></textarea></td>
</tr>
<td>Mother's Contact Number</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<td>Annual Income</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<th colspan="2">
<b>Academic Qualification</b>
</th>
```

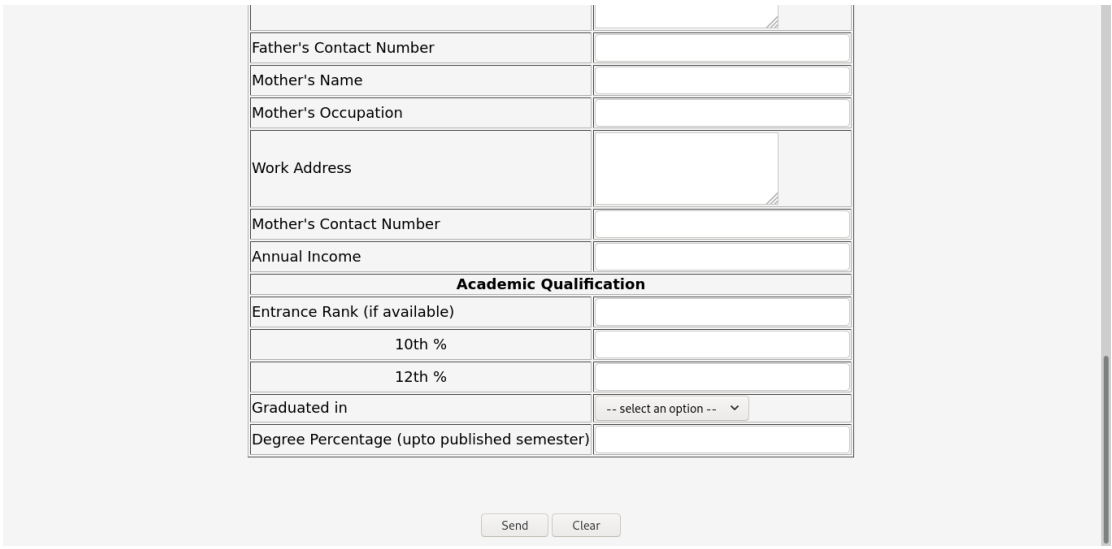
```
<tr>
<td>Entrance Rank (if available)</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td align="center">10th %</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td align="center">12th %</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
<tr>
<td>Graduated in</td>
<td><select name="religion" size="1" required>
<option disabled selected value> -- select an option -- </option>
<option value="BCA">BCA</option>
<option value="BTech">BTech</option>
<option value="BSc Computer Science">BSc Computer
Science</option>
<option value="Others">Others</option>
</select>
</tr>
<tr>
<td>Degree Percentage (upto published semester)</td>
<td><input type="text" maxlength="100" size="30" required>
</tr>
</table></br></br></br>
<table>
<tr>
<td align="center">
<input type="submit" name="send" value="Send">
```

```
</td>
<td align="center">
<input type="reset" name="clear" value="Clear">
</td>
</tr>
</table>
</div>
</body> </html>
```

**Output**





| | |
|---|---|
| | |
| Father's Contact Number | |
| Mother's Name | |
| Mother's Occupation | |
| Work Address | |
| Mother's Contact Number | |
| Annual Income | |
| **Academic Qualification** | |
| Entrance Rank (if available) | |
| 10th % | |
| 12th % | |
| Graduated in | -- select an option -- |
| Degree Percentage (upto published semester) | |

Send Clear

**Experiment No.: 4**

**Aim:** Create a HTML page with different types of frames such as floating frame, navigation frame & mixed frame.

**Source code**

Floating frame:

code:

```
<!DOCTYPE html>
<html>
<head>
<title>floating</title>
</head>
<body>
<iframe src="http://www.wikipedia.com" width="800" height="600">
</iframe>
</body>
</html>
```

**Output:**

Navigation Frame:

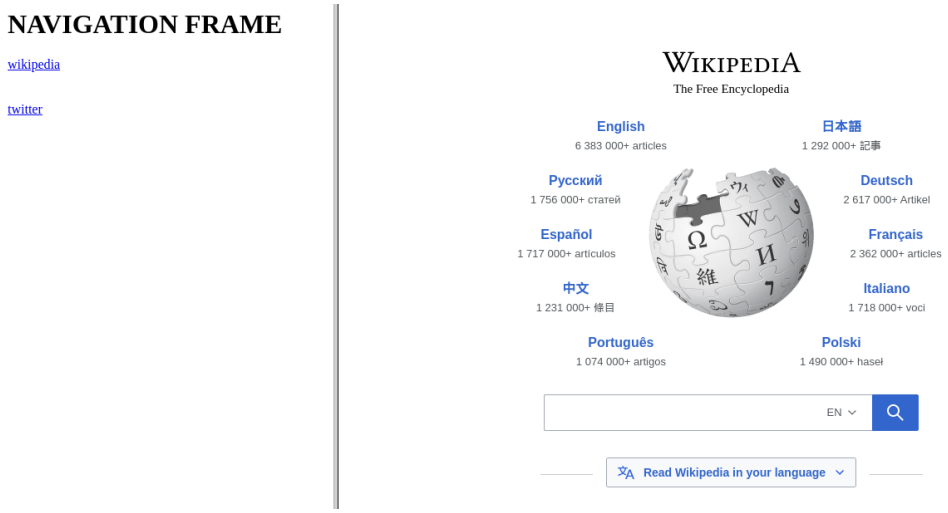
code1:

```
<html>
<head>
<title>navigation</title>
</head>
<frameset cols="400,*">
<frame src="nav2.html" name="showframe">
<frame name="showframe2">
</frameset>
</html>
```

code2:

```
<html>
<h1>NAVIGATION FRAME</h1>
<a href = "http://www.wikipedia.org"
target="showframe2">wikipedia</a><br><br><br>
<a href = "https://fgh-uk.com/" target="showframe2">twitter</a>
</html>
```

Output:

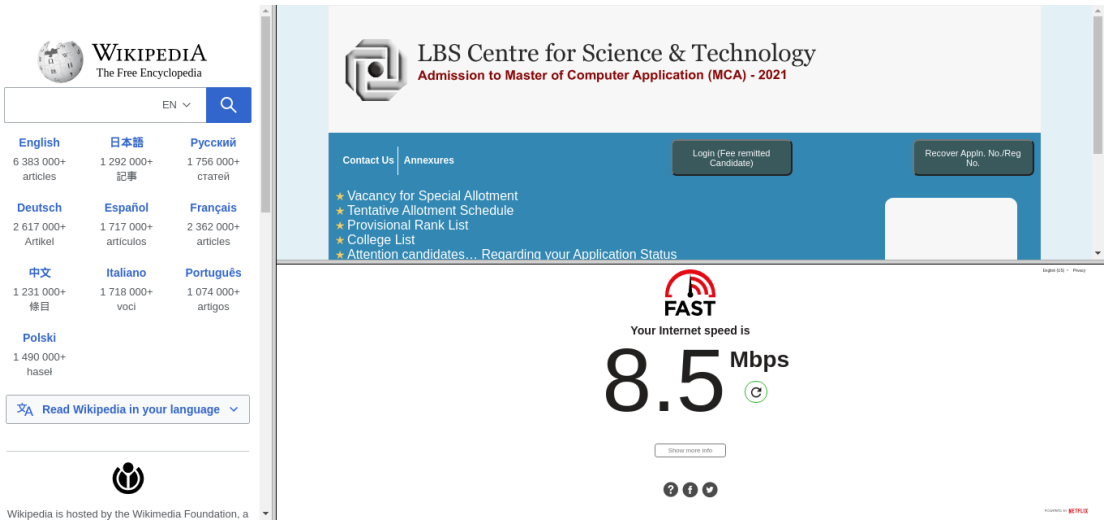


mixed frame

code:

```
<html>
<frameset cols="25%,*" scrolling="no" noresize>
<frame name="image1" src="http://www.wikipedia.org"></frame>
<frameset rows="50%,*" scrolling="no" noresize>
<frame name="image2" src="https://lbscentre.in/mcompapplication2021/"></frame>
<frame name="image3" src="https://fast.com/"></frame>
</frameset>
</html>
```

Output:



**Experiment No.: 5**

**Aim:** Analyze CSS by applying the different styles using inline, external & internal style sheets in a HTML file.

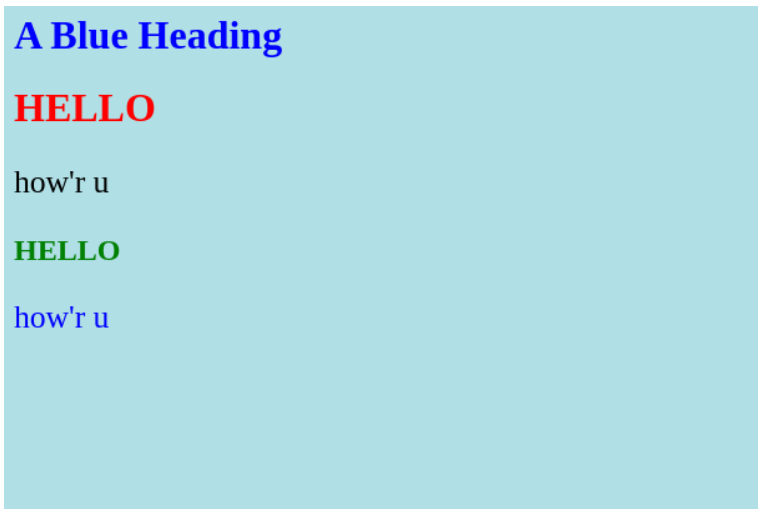
**Source code**

```
<html>
<head>
<title>css</title>
<style>……internal css
body {background-color: powderblue;}
</style>
</head>
<body>
<link rel="stylesheet" href="s.css">……..external css
<h1 style="color:blue;">A Blue Heading</h1>……inline css
<h1>HELLO</h1>
<p>how'r u</p>
<h2>HELLO</h2>
<p style="color:blue;">how'r u</p>
</body>
</html>
```

s.css……...css file

```
h1{color:red}
h2{color:green}
p {
  color: black;
  font-family: serif;
  font-size: 160%;
}
```

**Output**



**Experiment No.:6**

**Aim:** Create a HTML registration form and to validate the form using JavaScript code.

**Source code**

```
<html>
<head>
<title>Application for admission to Master of Computer Applications </title>
<style>
label{
display: inline-block;
float: left;
clear: left;
width: 250px;
text-align: left; /*Change to right here if you want it close to the inputs*/
}
input {
display: inline-block;
float: left;
}
.myDiv {

  background-color: #BE0D02;

   font-size: large;
   font-family: sans-serif;
}
.herDiv {

  background-color: ##fff3c9;

   font-size: large;
   font-family: sans-serif;
```

```
}
</style>
<script>
function validateForm() {
var x = document.forms["myForm"]["fname"].value;
if (x == "") {
alert("Name must be filled out");
return false;
}
var y = document.forms["myForm"]["address"].value;
if (y == "") {
alert("Address must be filled out");
return false;
}

var z = document.forms["myForm"]["cno"].value;
var phoneno = /^\+?([0-9]{2})\)?[-. ]?([0-9]{4})[-. ]?([0-9]{4})$/;
if((z.match(phoneno))
{
return true;
}
else
{
if (z == "") {
alert("number must be filled out");
return false;
}
var l = document.forms["myForm"]["email"].value;
var forma=/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
if(l.match(forma))
{
        return true;
```

```
}
else
{
if (l == "") {
alert("email must be filled out");
return false;
}
else
{
alert("you have entered invalid email address");
return false;
}
}
var k = document.forms["myForm"]["dob"].value;
if (k == "") {
alert("D.O.B must be filled out");
return false;
}
}
</script>
        </head>
<body bgcolor=#f5f5f5>
<div class="myDiv">
<center>
 <img  src="federal.png" width=150 alt=image>
 <img  src="logo_main.png" width=600 alt=image>
</center>
<br>
<br>
</div>
<br>
<div class="herDiv">
```

```
<center><h2>REGISTER FORM</center></h2>
<center><h2>MCA</center></h2>
<body font="Times new roman" color="black" bgcolor="white">
<hr align="center" width="50%"></br></br>
<form name="myForm" action="/action_page_post.php"
onsubmit="return validateForm()" method="post">
<center>
<table border="1">
<tr>
<th colspan="2">
<b>Basic Details</b>
</th>
</tr>
<tr>
<td>Name</td>
<td><input type="text" id="fname" maxlength="100" size="30" >
</tr>
<tr>
<td>Address</td>
<td><textarea size=80 id="address" rows="5" cols="29"></textarea></td>
</tr>
<tr>
<td>Contact Number</td>
<td><input type="text" id="cno" maxlength="100" size="30" >
</tr>
<tr>
<td>Email</td>
<td><input type="email" id="email" maxlength="100" size="30" >
</tr>
<tr>
<td>Date of Birth</td>
<td><input type="date" id="dob"></td>
```

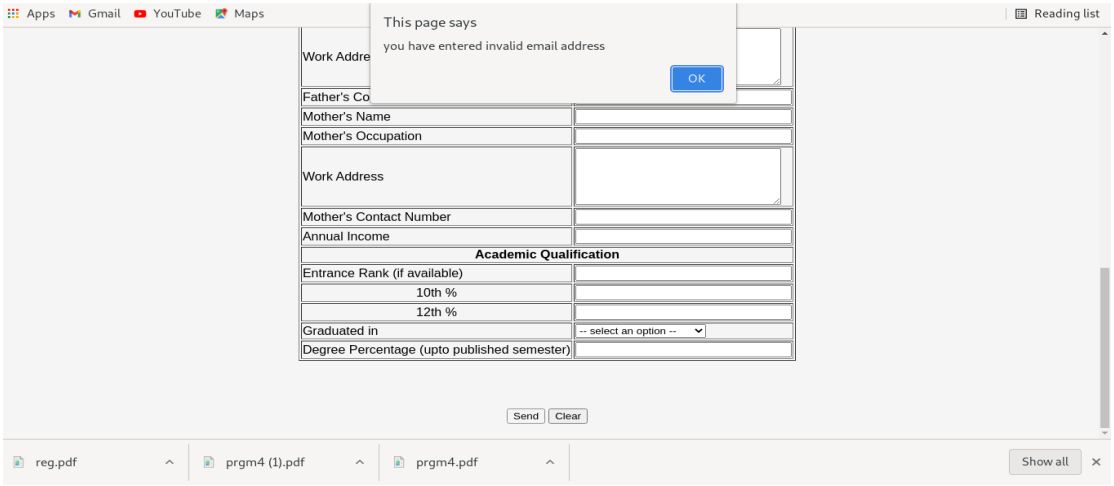
```
</tr>
<tr>
<td>Gender</td>
<td>
Male
<input type="radio"><br>
Female
<input type="radio"><br>
Others
<input type="radio"><br>
Prefer not to say
<input type="radio"><br>
</td>
<tr>
<td>Nationality</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td>Religion</td>
<td><select name="religion" size="1" >
        <option disabled selected value> -- select an option -- </option>
                        <option value="Hindu">Hindu</option>
                        <option value="Christian">Christian</option>
                        <option value="Muslim">Muslim</option>
                        <option value="Others">Others</option>
                </select>
</tr>
<tr>
<td>Father's Name</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
```

```
<tr>
<td>Father's Occupation</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td>Work Address</td>
<td><textarea size=80 rows="5" cols="29"></textarea></td>
</tr>
<td>Father's Contact Number</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<td>Mother's Name</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td>Mother's Occupation</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td>Work Address</td>
<td><textarea size=80 rows="5" cols="29"></textarea></td>
</tr>
<td>Mother's Contact Number</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<td>Annual Income</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<th colspan="2">
<b>Academic Qualification</b>
</th>
<tr>
```

```
<td>Entrance Rank (if available)</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td align="center">10th %</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td align="center">12th %</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
<tr>
<td>Graduated in</td>
<td><select name="religion" size="1" >
        <option disabled selected value> -- select an option -- </option>
                        <option value="BCA">BCA</option>
                        <option value="BTech">BTech</option>
                        <option value="BSc Computer Science">BSc Computer
Science</option>
                        <option value="Others">Others</option>
                </select>
</tr>
<tr>
<td>Degree Percentage (upto published semester)</td>
<td><input type="text" maxlength="100" size="30" >
</tr>
</table></br></br></br>
<table>
<tr>
<td align="center">
<input type="submit"  value="Send">
</td>
```

```
<td align="center">
<input type="reset" name="clear" value="Clear">
</td>
</tr>
</table>

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

**Output**



**Experiment No.: 7**

**Aim:** Create a HTML page to explain the use of various predefined functions in a string and math objects in JavaScript.

(String Functions- Length, slice, substring, substr, replace toUppercase, toLowercase, concat, trim, charAt, convert string to arrayindexof, search,includes). (Math Functions- round, ceil, floor, trunc, sign, pow, sqrt, abs, sin, cos, min, max, random, log)

**Source code**

```
<html>
<head><title>program 7</title>
<body bgcolor="white">
<p>The length property returns the length of a string:</p>
<h2>JavaScript String Length</h2>
<p id="length"></p>
<h2>JavaScript String slice()</h2>
<p id="demo"></p>

<script>

let text = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";
document.getElementById("length").innerHTML = text.length;
let str = "Apple, Banana, Kiwi ,Jackfruit";
document.getElementById("demo").innerHTML = str.slice(7,17);

</script>



<h2>JavaScript String substring()</h2>
<p id="sub"></p>
```

```
<script>

let sbr = "thomas,alva,edison";
document.getElementById("sub").innerHTML = sbr.substring(7,11);

</script>

<h2>JavaScript String substr()</h2>
<p id="de"></p>

<script>
let pkr = "jack,mock,dark,peek";
document.getElementById("de").innerHTML = pkr.substr(7,6);
</script>

<h2>Convert string to upper case</h2>

<button onclick="capt()">click to big</button>

<p id="big">hello world!</p>

<script>
function capt() {
  let cap = document.getElementById("big").innerHTML;
  document.getElementById("big").innerHTML =
  cap.toUpperCase();
}
</script>

<h2>Convert string to lower case:</h2>

<button onclick="small()">make it small</button>
```

```
<p id="omed">HELLO WORLD</p>

<script>
function small() {
  let xx = document.getElementById("omed").innerHTML;
  document.getElementById("omed").innerHTML =
  xx.toLowerCase();
}
</script>

<H2>The concat() method joins two or more strings</H2>

<p id="con"></p>

<script>
let t1 = "Hello";
let t2 = "World!";
let t3 = t1.concat(" ",t2);
document.getElementById("con").innerHTML = t3;
</script>


<h2>The trim() Method</h2>

<p id="a"></p>

<script>
let txt1 = "     Hello World     ";
let txt2 = txt1.trim();
```

```
document.getElementById("a").innerHTML =
"Length txt1=" + txt1.length + "<br>Length2 txt2=" + txt2.length;
</script>



<h2>The charAt() method returns the character at a given position in a string:</h2>


<p id="b"></p>


<script>
var tt = "HELLO WORLD";
document.getElementById("b").innerHTML = tt.charAt(0);
</script>


<h2>JavaScript  string to array, Methods</h2>
<p>Display the first array element, after a string split:</p>


<p id="c"></p>


<script>
let te = "a,b,c,d,e,f";
const myArray = te.split(",");
document.getElementById("c").innerHTML = myArray[0];
</script>


<h2>The indexOf() Method</h2>


<p>indexOf() returns the position of the first occurrence of a specified value in a
string.</p>


<p> for eg:Find "welcome":</p>
```

```
<p id="e"></p>

<script>
let xt = "Hello world, welcome to the universe.";
let result = xt.indexOf("welcome");

document.getElementById("e").innerHTML = result;
</script>




<h2>The search() Method</h2>

<p>search() searches a string for a value and returns the position of the match:</p>
<p> Mr. Blue has a blue house</p>
<p id="f"></p>

<script>
let txxt = "Mr. Blue has a blue house"
let position = txxt.search("Blue");

document.getElementById("f").innerHTML = position;
</script>




<h2>The includes() Method</h2>

<p>includes() returns true if an array contains a specified element:</p>
```

```
<p>"Cat", "Orange", "Apple", "Mango", "Book"</p>
<p> Check mango</p>
<p id="g"></p>

<script>
const things = ["Cat", "Orange", "Apple", "Mango", "Book"];
document.getElementById("g").innerHTML = things.includes("Mango");
</script>




<h2>JavaScript Math.round()</h2>

<p>Math.round(x) returns the value of x rounded to its nearest integer:(4.6)</p>

<p id="h"></p>

<script>
document.getElementById("h").innerHTML = Math.round(4.6);
</script>




<h2>JavaScript Math.ceil()</h2>

<p>Math.ceil() rounds a number <strong>up</strong> to its nearest integer:(4.4)</p>

<p id="i"></p>
```

```
<script>
document.getElementById("i").innerHTML = Math.ceil(4.4);
</script>




<h2>JavaScript Math.floor()</h2>

<p>Math.floor(x) returns the value of x rounded <strong>down</strong> to its nearest integer:(4.7)</p>

<p id="j"></p>

<script>
document.getElementById("j").innerHTML = Math.floor(4.7);
</script>









<h2>JavaScript Math.trunc()</h2>

<p>Math.trunc(x) returns the integer part of x:(4.7)</p>

<p id="k"></p>
```

```
<script>
document.getElementById("k").innerHTML = Math.trunc(4.7);
</script>









<h2>JavaScript Math.sign()</h2>

<p>Math.sign(x) returns if x is negative, null or positive:(4)</p>

<p id="l"></p>

<script>
document.getElementById("l").innerHTML = Math.sign(4);
</script>









<h2>JavaScript Math.pow()</h2>

<p>Math.pow(x,y) returns the value of x to the power of y:(4.2)</p>

<p id="m"></p>

<script>
document.getElementById("m").innerHTML = Math.pow(4,2);
</script>
```

```
<h2>JavaScript Math.sqrt()</h2>

<p>Math.sqrt(x) returns the square root of x:(100)</p>

<p id="n"></p>

<script>
document.getElementById("n").innerHTML = Math.sqrt(100);
</script>




<h2>JavaScript Math.abs()</h2>

<p>Math.abs(x) returns the absolute (positive) value of x:(-4.4)</p>

<p id="o"></p>

<script>
document.getElementById("o").innerHTML = Math.abs(-4.4);
</script>
```

```
<h2>JavaScript Math.<strong>sin</strong>()</h2>

<p>Math.sin(x) returns the sin of x (given in radians):</p>
<p>Angle in radians = (angle in degrees) * PI / 180.</p>

<p id="p"></p>

<script>
document.getElementById("p").innerHTML =
"The sine value of 90 degrees is " + Math.sin(90 * Math.PI / 180);
</script>









<h2>JavaScript Math.<strong>cos</strong>()</h2>

<p>Math.cos(x) returns the cosine of x (given in radians):</p>
<p>Angle in radians = (angle in degrees) * PI / 180.</p>

<p id="q"></p>

<script>
document.getElementById("q").innerHTML =
"The cosine value of 0 degrees is " + Math.cos(0 * Math.PI / 180);
</script>
```

```
<h2>JavaScript Math.<strong>min</strong>() JavaScript Math.max()</h2>

<p>Math.min() returns the lowest value in a list of arguments(0, 150, 30, 20, -8, -200):</p>

<p id="r"></p>

<script>
document.getElementById("r").innerHTML =
Math.min(0, 150, 30, 20, -8, -200);
</script>

<p>Math.max() returns the highest value in a list of arguments.(0, 150, 30, 20, -8, -200)</p>

<p id="s"></p>

<script>
document.getElementById("s").innerHTML =
Math.max(0, 150, 30, 20, -8, -200);
</script>

<h2>JavaScript Math.random()</h2>
```

```
<p>Math.random() returns a random number between 0 and 1:</p>

<p id="u"></p>

<p>Tip: Click on "refresh on your s/m or reload the page" several times.</p>

<script>
document.getElementById("u").innerHTML = Math.random();
</script>



<h2>JavaScript Math.log()</h2>

<p>Math.log() returns the natural logarithm of a number:-0</p>

<p id="v"></p>

<script>
document.getElementById("v").innerHTML = Math.log(1);
</script>

<p>Math.log() returns the natural logarithm of a number:-1</p>

<p id="W"></p>

<script>
document.getElementById("W").innerHTML = Math.log(2);
</script>
</body>
</html>
```

# Output

The length property returns the length of a string:

### JavaScript String Length

26

### JavaScript String slice()

Banana, Ki

### JavaScript String substring()

alva

### JavaScript String substr()

ck,dar

### Convert string to upper case

click to big

HELLO WORLD!

### Convert string to lower case:

make it small

hello world

### The concat() method joins two or more strings

### The concat() method joins two or more strings

Hello World!

### The trim() Method

Length txt1=21
Length2 txt2=11

### The charAt() method returns the character at a given position in a string:

H

### JavaScript string to array, Methods

Display the first array element, after a string split:

a

### The indexOf() Method

indexOf() returns the position of the first occurrence of a specified value in a string.

for eg:Find "welcome":

13

### The search() Method

search() searches a string for a value and returns the position of the match:

Mr. Blue has a blue house

### The search() Method

search() searches a string for a value and returns the position of the match:

Mr. Blue has a blue house

4

### The includes() Method

includes() returns true if an array contains a specified element:

"Cat", "Orange", "Apple", "Mango", "Book"

Check mango

true

### JavaScript Math.round()

Math.round(x) returns the value of x rounded to its nearest integer:(4.6)

5

### JavaScript Math.ceil()

Math.ceil() rounds a number **up** to its nearest integer:(4.4)

5

### JavaScript Math.floor()

Math.floor(x) returns the value of x rounded **down** to its nearest integer:(4.7)

4

### JavaScript Math.trunc()

Math.trunc(x) returns the integer part of x:(4.7)

4

### JavaScript Math.sign()

Math.sign(x) returns if x is negative, null or positive:(4)

1

### JavaScript Math.pow()

Math.pow(x,y) returns the value of x to the power of y:(4.2)

16

### JavaScript Math.sqrt()

Math.sqrt(x) returns the square root of x:(100)

10

### JavaScript Math.sin()

Math.sin(x) returns the sin of x (given in radians):

Angle in radians = (angle in degrees) * PI / 180.

The sine value of 90 degrees is 1

### JavaScript Math.cos()

Math.cos(x) returns the cosine of x (given in radians):

Angle in radians = (angle in degrees) * PI / 180.

The cosine value of 0 degrees is 1

### JavaScript Math.min() JavaScript Math.max()

Math.min() returns the lowest value in a list of arguments(0, 150, 30, 20, -8, -200):

-200

Math.max() returns the highest value in a list of arguments.(0, 150, 30, 20, -8, -200)

150

## JavaScript Math.random()

Math.random() returns a random number between 0 and 1:

0.8060272925351117

Tip: Click on "refresh on your s/m or reload the page" several times.

## JavaScript Math.log()

Math.log() returns the natural logarithm of a number:-0

0

Math.log() returns the natural logarithm of a number:-1

0.6931471805599453

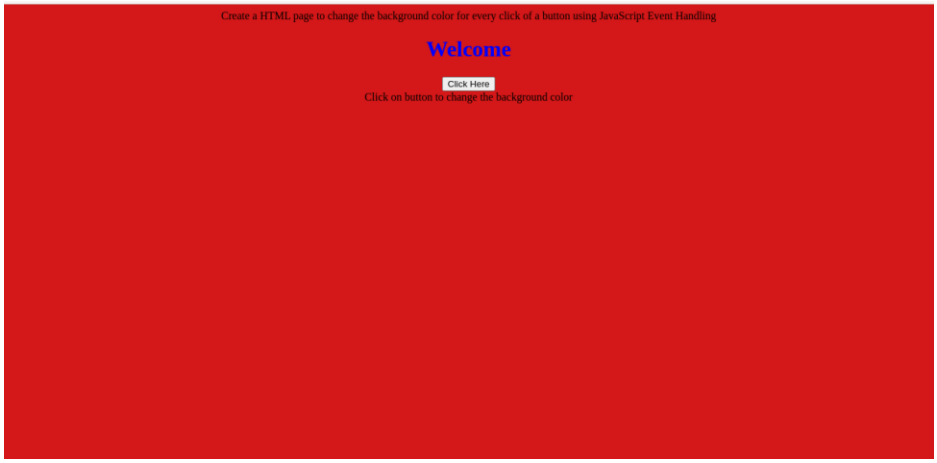
**Experiment No.:8**

**Aim:** Create a HTML page to change the background color for every click of a button using JavaScript Event Handling.

**Source code**

```
<!DOCTYPE HTML>
<html>
<head>
<title>
changing the background color
</title>
</head>
<body style = "text-align:center;">
<h1 style = "color:blue;" >
Welcome
</h1>
<button type="button" id="color-button" onclick="changeBg()">Click Here
</button>
<br>
<script>
document.writeln( "Click on button to change the background color");
const pageBody = document.querySelector("body");
function changeBg()
{
let color = '#'+(Math.random()*0xFFFFFF<<0).toString(16);

pageBody.style.background = color;
}
</script>
</body>
</html>
```

## Output


Create a HTML page to change the background color for every click of a button using JavaScript Event Handling
Welcome
Click Here
Click on button to change the background color

**Experiment No.:9**

**Aim:** Generate the calendar using JavaScript code by getting the year and month from the user.

**Source code**

```
<html>
<head><title>Calendar</title>
<style>
h1{
text-align:center;
}
body{
background-color: white;
}
table {
border-collapse: collapse;
}
td, th {
border: 1px solid black;
padding: 3px;
text-align: center;
}
th {
font-weight: bold;
background-color: #E6E6E6;
}
</style>
</head>

<body>
<h1>CALENDAR</h1><br>
Enter The year : <input type="number" name="cal" id="cal" /><br>
```

```
Enter The Month: <input type="number" name="month" id="month" /><br>


<div id="calendar"></div>


<script>
var year = document.getElementById("cal").value;
var month = document.getElementById("month").value;
function getDay(date) {
let day = date.getDay();
if (day == 0) day = 7;
return day - 1;
}


function createCalendar(elem, year, month) {
let mon = month - 1;
let d = new Date(year, mon);
let table
='<table><tr><th>MON</th><th>TUE</th><th>WED</th><th>THU</th><th>FRI<
/th><th>SAT</th><th>SUN</th></tr><tr>';


for (let i = 0; i < getDay(d); i++) {
table += '<td>*</td>';
}



while (d.getMonth() == mon) {
table += '<td>' + d.getDate() + '</td>';
if (getDay(d) % 7 == 6) {
table += '</tr><tr>';
}
d.setDate(d.getDate() + 1);
}
if (getDay(d) != 0) {
```

```
for (let i = getDay(d); i < 7; i++) {
table += '<td>*</td>';
}
}

table += '</tr></table>';
elem.innerHTML = table;
}
createCalendar(calendar, year, month);
</script>
</body>
</html>
```

**Output**

**CALENDAR**
Enter The year : 2022
Enter The Month: 1

| MO | TU | WE | TH | FR | SA | SU |
|---|---|---|---|---|---|---|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

**Experiment No.:10**

**Aim:** Compose Electricity bill from user input based on a given tariff using PHP.

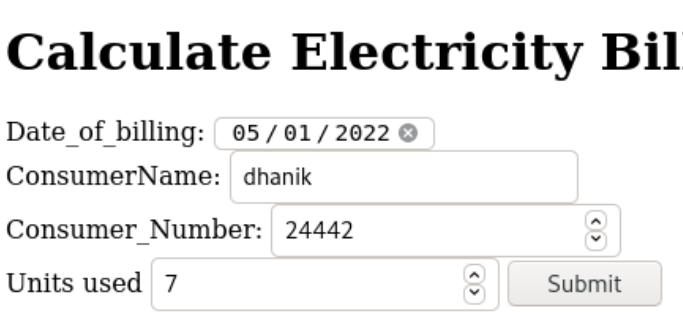
**Source code**

```
<!DOCTYPE html>
<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 = 'Amount to be paid  ' .' - ' . $result;
   }
}
/**
 * To calculate electricity bill as per unit cost
 */
function calculate_bill($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>
        <div id="page-wrap">
                <h1>Calculate Electricity Bill</h1>

                <form action="" method="post" id="quiz-form">

                Date_of_billing: <input type="date" name="date_bill"><br>
ConsumerName: <input type="text" name="cname"><br>
Consumer_Number: <input type="number" name="cnum"><br>
Units used
                <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>
```

**Output**



**Experiment No.:11**

**Aim:** Build a PHP code to store name of students in an array and display it using print_r sfunction. Sort and Display the same using asort & arsort functions.

**Source code**

```
<?php
$stud=array("Sourav","Abhiram","Goutham");
echo "List of Students";
print_r($stud);
echo "<br>";
echo "Sorted list:";
echo "<br>";
arsort($stud);
print_r($stud);
echo "<br>";
echo "Reverse list:";
echo "<br>";
asort($stud);
print_r($stud);
?>
```

**Output**

```
List of StudentsArray ( [0] => Sourav [1] => Abhiram [2] => Goutham )
Reverse list:
Array ( [0] => Sourav [2] => Goutham [1] => Abhiram )
Sorted list:
Array ( [1] => Abhiram [2] => Goutham [0] => Sourav )
```

**Experiment No.:12**

**Aim:** Build a PHP code to store name of Indian Cricket players in an array and display the same in HTML table.

**Source code**

```
<!DOCTYPE html>
<html>
<body>
 <?php
 $Indcricketers= array("Virat Kohli", "M S Dhoni", "Rohit Sharma");
 echo "Indian Cricketers: " . $Indcricketers[0] . ", " . $Indcricketers[1] .
" and " .$Indcricketers[2] . ".";
 echo "<h3>INDIAN CRICKETERS</h3><table border='1'>
        <tr>
        <th>NO</th>
        <th>NAMES</th>
        </tr>
        <tr>
        <td>1</td>
        <td>Virat Kohli</td>
        </tr>
        <tr>
        <td>2</td>
        <td>M S Dhoni</td>
        </tr>
        <tr>
```

```
        <td>3</td>
        <td>Rohit Sharma</td>
        </tr>";
        ?>
</body>
</html>
```

**Output**

Indian Cricketers: Virat Kohli, M S Dhoni and Rohit Sharma.

**INDIAN CRICKETERS**

| NO | NAMES |
|---|---|
| 1 | Virat Kohli |
| 2 | M S Dhoni |
| 3 | Rohit Sharma |

**Experiment No.: 13**

**Aim:** Using PHP and MySQL, develop a program to accept book information viz. Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings

**Source code**

Book_info.html

```
<html>
<head>
<title>book</title>
</head>
<body align="center"><u>BOOK INFORMATION SYSTEM</u><br>
<a href="add_book.html">Add Book</a><br>
<a href="search.html">Search Book</a><br>
</body>
</html>
```

Add_book.html

```
<html><head>
<title>add book</title></head>
<body>
<form name="frm1" action="addl.php" method="POST">
<center><b><u>Enter Book Details</u></b><br>
Access Number:<input type="text" name="num"><br>
Title:<input type="text" name="tit"><br>
Author:<input type="text" name="author"><br>
Edition:<input type="text" name="edi"><br>
Publisher:<input type="text" name="pub"><br>
<input type="submit" name="Submit">
<input type="reset" name="Reset">
</form>
```

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

Addl.php

```
<?php
$num=$_POST['num'];
$tit=$_POST['tit'];
$author=$_POST['author'];
$edi=$_POST['edi'];
$pub=$_POST['pub'];
$con=new
mysqli("localhost","fisat","fisat","fisatdb");
if($con==false)
{ echo "Failed to connect"; }
else
{ echo "connected"; }
$sql="INSERT INTO LIBSYSTEM
VALUES($num,'$tit','$author','$edi','$pub')";
if($con->query($sql))
{
echo "<BR>";
echo 'New row added';
}
else
{
echo "ERROR:could not execute query";
}
$con->close();
?>
```

Search.html

```
<html>
<head>
<title>search</title>
</head>
<body>
<form name="frm2" action="searchl.php"
method="POST">
<center>
<b><u>SEARCH A BOOK</u></b><br>
Enter book title:<input type="text" name="txt"><br>
<input type="submit" name="Submit">
</center>
</form>
</body>
</html>
```

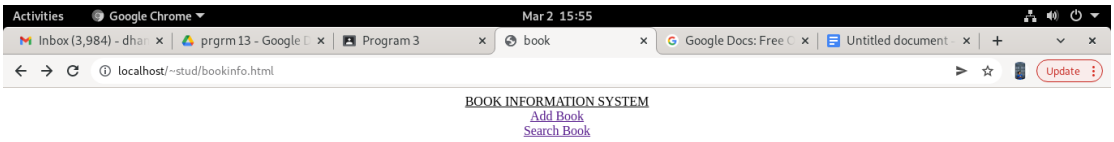
Searchl.php

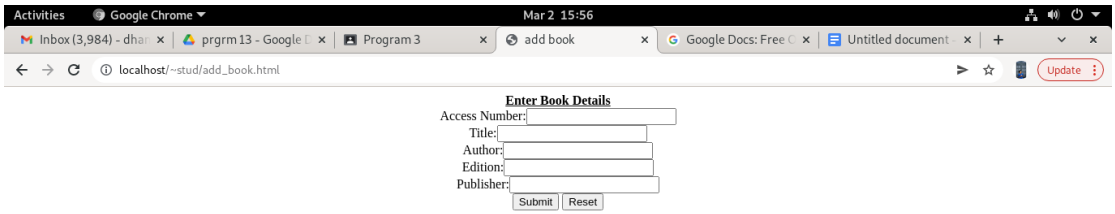
```
<?php
$title=$_POST['txt'];
$con=new
mysqli("localhost","fisat","fisat","fisatdb");
if($con==false)
{
echo "Failed to connect";
}
else
{
echo "connected\n";
}
```

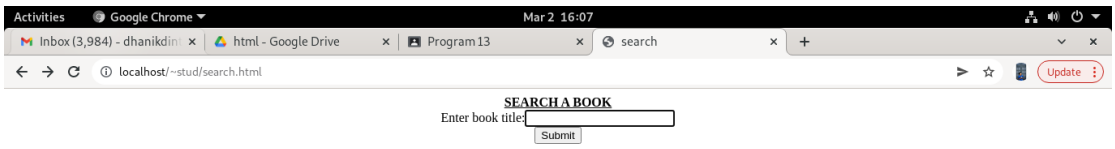
```
$sql="select * from LIBSYSTEM where
Title='$title'";
if($result=$con->query($sql))
{
if($result->num_rows>0)
{
while($row=$result->fetch_array())
{ echo
"\n".$row[0].":".$row[1].":".$row[2].":".$row[3].":".
$row[4]."\n";}
$result->close();
}else
{ echo "\nCould not found the book"; }
}
else
{ echo "\nError:could not connect"; }
$con->close();
?>
```

## Output

```
MariaDB [fisatdb]> desc LIBSYSTEM;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| ACCESS_NUM | int(20)     | NO   | PRI | NULL    |       |
| TITLE      | varchar(50) | NO   |     | NULL    |       |
| AUTHORS    | varchar(50) | NO   |     | NULL    |       |
| EDITION    | varchar(20) | NO   |     | NULL    |       |
| PUBLISHER  | varchar(30) | NO   |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.001 sec)

MariaDB [fisatdb]> select * from LIBSYSTEM;
+------------+-------+---------+---------+-----------+
| ACCESS_NUM | TITLE | AUTHORS | EDITION | PUBLISHER |
+------------+-------+---------+---------+-----------+
|          1 | tgr   | ds      | 3       | sdf       |
|         11 | tgrw  | dss     | 33      | sdfd      |
+------------+-------+---------+---------+-----------+
2 rows in set (0.000 sec)
```




Activities
Google Chrome
Mar 2 15:56
Inbox (3,984) - dha
prgrm 13 - Google D
Program 3
add book
Google Docs: Free C
Untitled document
localhost/~stud/add_book.html
Update
Enter Book Details
Access Number:
Title:
Author:
Edition:
Publisher:
Submit
Reset


Activities
Google Chrome
Mar 2 16:07
Inbox (3,984) - dhanikdin
html - Google Drive
Program 13
search
localhost/~stud/search.html
Update
SEARCH A BOOK
Enter book title:
Submit

**Experiment No.: 14**

**Aim:** Using PHP and MySQL, develop a program to collect airline details and display all the airlines between a particular source and destination.

**Source code**

**flightinfo.html**

```
<html>
<head>
<title>book</title>
</head>
<body align="center"><u>FLIGHT INFORMATION SYSTEM</u><br>
<a href="fadd_book.html">Book FLIGHT</a><br>
<a href="fsearch.html">Search FLIGHT</a><br>
</body>
</html>
```

fadd.html

```
<html><head>
<title>book flight</title></head>
<body>
<form name="frm1" action="faddl.php" method="POST">
<center><b><u>Enter flight Details</u></b><br><br>
Flight Number:<input type="text" name="fnum"><br>
Flight Name:<input type="text" name="name"><br>
source:<input type="text" name="source"><br>
Destination:<input type="text" name="dest"><br>
Date And Time Of Departure:<input type="datetime-local" name="date"><br>
<input type="submit" name="Submit">
<input type="reset" name="Reset">
</form>
</body>
```

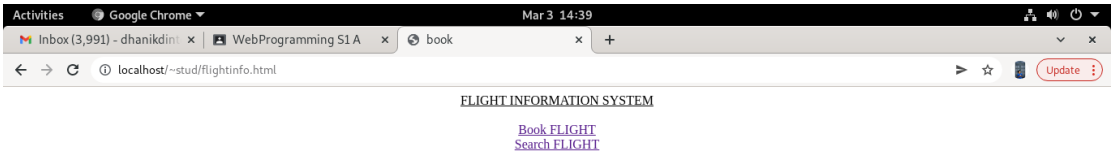
```
</html>
```

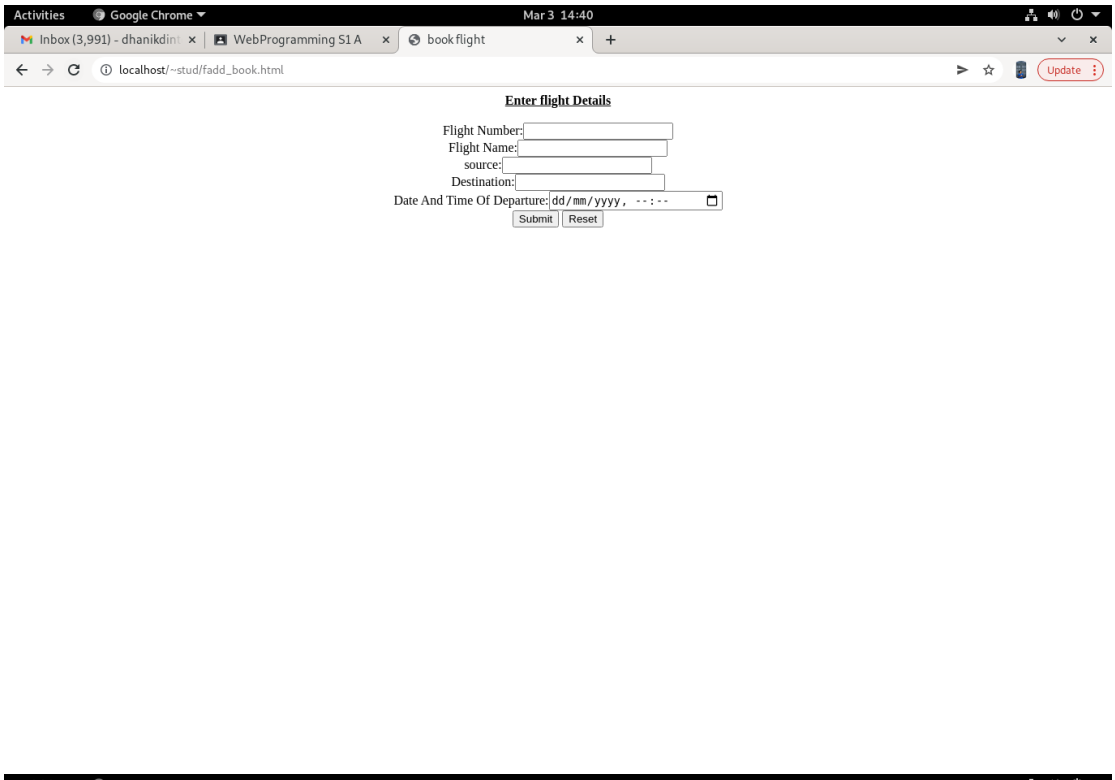
faddl.php

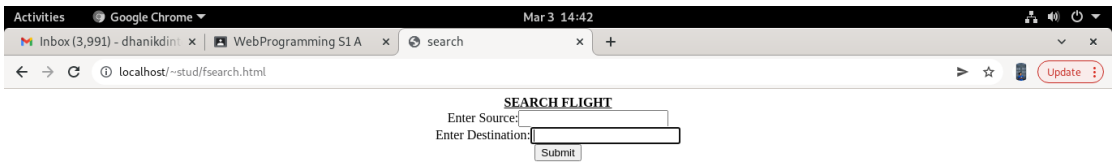
```
<?php
$fnum=$_POST['fnum'];
$name=$_POST['name'];
$source=$_POST['source'];
$dest=$_POST['dest'];
$date=$_POST['date'];
$con=new
mysqli("localhost","fisat","fisat","fisatdb");
if($con==false)
{ echo "Failed to connect"; }
else
{ echo "connected"; }
$sql="INSERT INTO flightsystem
VALUES($fnum,'$name','$source','$dest','$date')";
if($con->query($sql))
{
echo "<BR>";
echo 'New row added';
}
else
{
echo "ERROR:could not execute query";
}
$con->close();
?>
```

## Output

```
MariaDB [fisatdb]> desc flightsystem;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| fnumber     | int(20)     | NO   | PRI | NULL    |       |
| name        | varchar(25) | NO   |     | NULL    |       |
| source      | varchar(25) | NO   |     | NULL    |       |
| destination | varchar(25) | NO   |     | NULL    |       |
| date        | datetime    | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
5 rows in set (0.001 sec)

MariaDB [fisatdb]> select * from flightsystem;
+---------+------+--------+-------------+---------------------+
| fnumber | name | source | destination | date                |
+---------+------+--------+-------------+---------------------+
|      21 | ds   | sda    | sdd         | 2022-03-11 14:31:00 |
|      32 | sd   | ds     | cfd         | 2022-03-24 14:40:00 |
+---------+------+--------+-------------+---------------------+
2 rows in set (0.000 sec)
```




Activities
Google Chrome
Mar 3 14:40
Inbox (3,991) - dhanikdin
WebProgramming S1 A
book flight
localhost/~stud/fadd_book.html
Update
Enter flight Details
Flight Number:
Flight Name:
source:
Destination:
Date And Time Of Departure:
dd/mm/yyyy, --:--
Submit
Reset


Activities
Google Chrome
Mar 3 14:42
Inbox (3,991) - dhanikdin
WebProgramming S1 A
search
localhost/~stud/fsearch.html
Update
SEARCH FLIGHT
Enter Source:
Enter Destination:
Submit