

Experiment-1

AIM: Develop static pages (using only HTML) of an online Book store. The pages should resemble: www.amazon.com. The website should consist the following pages.

Home page

- Registration and user Login
- User profile page
- Books catalog
- Shopping cart
- Payment by credit card Order Conformation

Description:

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages.

HOME PAGE:

Main.html

```
<html>
<frameset rows="25%,*">
<frame src="top.html" name="top" scrolling="no" frameborder="0">
<frameset cols="25%,75%">
<frame src="left.html" name="left" scrolling="no" frameborder="0">
<frame src="right.html" name="right" scrolling="auto" frameborder="0">
</frameset>
</frameset>
</html>
```

Top.html

```
<html>
<body bgcolor="pink"><br><br>
<marquee><h1 align="center"><b><u>ONLINE BOOK
STORAGE</u></b></h1></marquee>
</body>
</html>
```

Right.html

```
<html>
<body>
<br><br><br><br><br>
<h2 align="center">
<b><p> welcome to online book storage. Press login if you are
having id otherwise press registration.</p></b></h2>
</body></html>
```

Left.html

```
<html>
<body bgcolor="pink">
<h3>
<ul>
<li>
<a href="login.html" target="right">
<fontcolor="black">LOGIN</font></a></li><br><br>
<li><a href="profile.html" target="right">
<font color="black">USERPROFILE</font></a></li><br><br>
<li><a href="catalog.html" target="right">
<font color="black">BOOKS CATALOG</font></a></li><br><br>
<li><a href="scart.html" target="right">
<font color="black">SHOPPINGCART</font></a></li><br><br>
<li><a href="payment.html" target="right">
<font color="black"> PAYMENT</font></a></li><br><br>
</ul>
</body>
</html>
```

REGISTRATION AND USER LOGIN:

Login.html

```
<html>
<head>
<title> login</title>
</head>
<body bgcolor="cyan"><center>
<strong><h1> AMAZON </h1></strong></center>
<right>
<table align="right">
<tr>
<td><h4>user name</td>
<td><input type="text" ></td>
<td></td>
</tr>
<tr>
<td><h4>password</td>
<td><input type="password"></td>
<td></td>
</tr>
<tr>
<td>
<form method="post" action="catalog.html" >
<input type="submit" value="submit" >
</form>
```



```
</tr>
</form>
</body>
</html>
```

BOOKS CATALOG

```
<html>
<head>
<title> books catalog</title>
</head>
<body bgcolor="cyan">
<center><h1>AMAZON</h1></center>
<form method="post" action="shopping.html">
<left>
<table>
<tr>
<td><b><h3>frontend books</td>
<td></td></tr>
<tr>
<td></td>
<td><h4>C&Ds</td>
</tr>
<tr>
<td></td>
<td><h4>Ads</td>
</tr>
<tr>
<td></td>
<td><h4>JAVA
</td></tr>
<tr>
<td><b><h3>backend books</td>
<td></td>
</tr>
<tr>
<td></td>
<td><h4>Oracle</td>
</tr>
<tr>
<td></td>
<td><h4>Ms SQL Server
</td></tr>
<tr>
<td></td>
<td><h4>MySql </td>
```

```

</tr>
</table>
</h4>
<center>
<b>for buy one of these books
</b><input type="submit" value="click here">
</center>
</form>
</body>
</html>

```

SHOPPING CART

```

<html>
<head><title>shopping cart</title>
</head>
<body bgcolor="cyan">
<center><h1>
Shopping Cart</h1></center>
<table align="center">
<tr>
<td>Text Books</td>
<td>
<select >
<optgroup label="select the book">
<option value="C&Ds">C&Ds
<option value="Ads">Ads
<option value="Java">Java
<option value="Oracle">Oracle
<option value="Ms SQL Server">Ms SQL Server
<option value="MySql">MySql
</optgroup>
</select>
</td></tr>
<tr>
<td>Quantity</td>
<td>
<input type="text" id="q">
</td></tr>
<tr>
<td></td>
<td>
<form method=post action="payment.html">
<input type="submit" value=ok />
</form>
</td></tr>

```

```

</table>
<center>
<pre>Cost of one book is"500" + shipping "100"</pre>
</center>
<body>
</html>

```

PAYMENT BY CREDIT CARD

```

<html>
<head><title>payment</title></head>
<body bgcolor="cyan">
<center><h1>Payment By Credit Card</h1></center>
<form method=post action="ordrconform.html">
<br><br><br><br><br>
<table align="center">
<tr>
<td>
<h4>Total Amount</h4></td>
<td><input type="text">
</td>
</tr>
<tr>
<td><h4>Credit Card Number</td>
<td><input type="text"></td>
</tr>
<tr>
<td>
<td><input type="submit" value=OK>
</td>
</tr>
</table>
</form></body>
</html>

```

Order Conformation

Ordrconform.html

```

<html>
<head><title>order conformation</title><M/head>
<body bgcolor="cyan">
<center>
<h1><b>BOOK SHOPPING</h1>
<pre><strong>
<b>Your order Is Conformed
</strong></pre>

```

```
<h2><b>THANK YOU</b></h2>
</center>
</body></html>
```

ACTUAL OUTPUTS

Home.html:



Login.html:



Register.html

File:///C:/19021D0524/main.html

Apps Digital Transformation Java Implementation

ONLINE BOOK STORAGE

- **REGISTRATION AND LOGIN**
- **USER PROFILE**
- **BOOKS CATALOG**
- **SHOPPING CART**
- **PAYMENT AND ORDER CONFIRMATION**

Register
Username:
Email:
Password:
Confirm Password:
Phone:
DOB:
Gender: ☐ female ☐ male

Profile.html

ONLINE BOOK STORAGE

- **REGISTRATION AND LOGIN**
- **USER PROFILE**
- **BOOKS CATALOG**
- **SHOPPING CART**
- **PAYMENT AND ORDER CONFIRMATION**

Your Profile
Username: John
Email: john999@gmail.com
Phone: 9384758492
Gender: Male

Catalog.html

File:///C:/19021D0524/main.html

Apps Digital Transformation Java Implementation

ONLINE BOOK STORAGE

- **REGISTRATION AND LOGIN**
- **USER PROFILE**
- **BOOKS CATALOG**
- **SHOPPING CART**
- **PAYMENT AND ORDER CONFIRMATION**

Books Catalog			Cart
Bookname	Price		
Java	530/-		<input type="button" value="Add to cart"/>
MST	900/-		<input type="button" value="Add to cart"/>
Machine Learning	300/-		<input type="button" value="Add to cart"/>
Data Mining	600/-		<input type="button" value="Add to cart"/>

Cart.html

App

Digital Transformation

Java Implementation

ONLINE BOOK STORAGE

REGISTRATION AND LOGIN

USER PROFILE

BOOKS CATALOG

SHOPPING CART

PAYMENT AND ORDER CONFIRMATION

Bookname

JAVA

MST

Machine learning

Price

Rs.530

Rs.900

Rs.300

Quantity

1

1

2

Amount

Rs.530

Rs.900

Rs.600

buy

Payment.html

App

Digital Transformation

Java Implementation

ONLINE BOOK STORAGE

REGISTRATION AND LOGIN

USER PROFILE

BOOKS CATALOG

SHOPPING CART

PAYMENT AND ORDER CONFIRMATION

Payment

Card number:

valid till:

phone number:

Reset

Submit

Confirm

App

Digital Transformation

Java Implementation

ONLINE BOOK STORAGE

REGISTRATION AND LOGIN

USER PROFILE

BOOKS CATALOG

SHOPPING CART

PAYMENT AND ORDER CONFIRMATION

THANK YOU

VISIT AGAIN

Experiment-2

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

Description:

JavaScript (often shortened to JS) is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. JavaScript can function as both a procedural and an object oriented language. JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behavior.

Src.js

```
function onlyNumbers(evt)
{
    var e = event || evt; // For trans-browser compatibility
    var charCode = e.which || e.keyCode;
    if (charCode > 31 && (charCode < 48 || charCode > 57))
        return false;
    return true;
}
function NumToWord(inputNumber, outputControl)
{
    var str = new String(inputNumber);
    var splt = str.split("");
    var rev = splt.reverse();
    var once = ['Zero', 'One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine'];
    var twos = ['Ten', 'Eleven', 'Twelve', 'Thirteen', 'Fourteen', 'Fifteen', 'Sixteen', 'Seventeen', 'Eighteen', 'Nineteen'];
    var tens = ['', 'Ten', 'Twenty', 'Thirty', 'Forty', 'Fifty', 'Sixty', 'Seventy', 'Eighty', 'Ninety'];
    numLength = rev.length;
    var word = new Array();
    var j = 0;
    for (i = 0; i < numLength; i++) {
        switch (i)
        {
            case 0:
                if ((rev[i] == 0) || (rev[i + 1] == 1))
                    { word[j] = "";}
```

```

        else {
            word[j] = once[rev[i]];
        }
        word[j] = word[j];
        break;
case 1: aboveTens();
        break;
case 2: if (rev[i] == 0) {
            word[j] = "; ";
        }
        else if ((rev[i - 1] == 0) || (rev[i - 2] == 0))
            { word[j] = once[rev[i]] + " Hundred "; }
        else {
            word[j] = once[rev[i]] + " Hundred and ";
        }
        break;

case 3: document.write("Number Out of Range");
        break;
default: break;
        }
        j++;
    }
function aboveTens()
{
    if (rev[i] == 0)
        { word[j] = "; "; }
    else if (rev[i] == 1)
        { word[j] = twos[rev[i - 1]]; }
    else
        { word[j] = tens[rev[i]]; }
}
word.reverse();
var finalOutput = "";
for (i = 0; i < numLength; i++)
{
    finalOutput = finalOutput + word[i];
}
document.getElementById(outputControl).innerHTML = finalOutput;
}

```

Main.html

```

<html>
<head>
<title>HTML - Convert numbers to words using JavaScript</title>
<script src="src.js" type="text/javascript"></script>

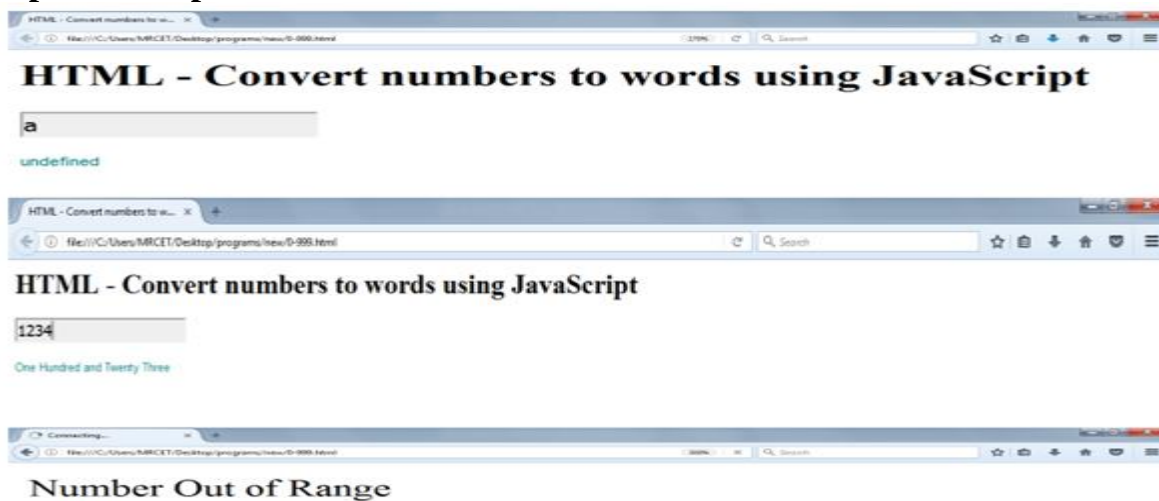
```

```

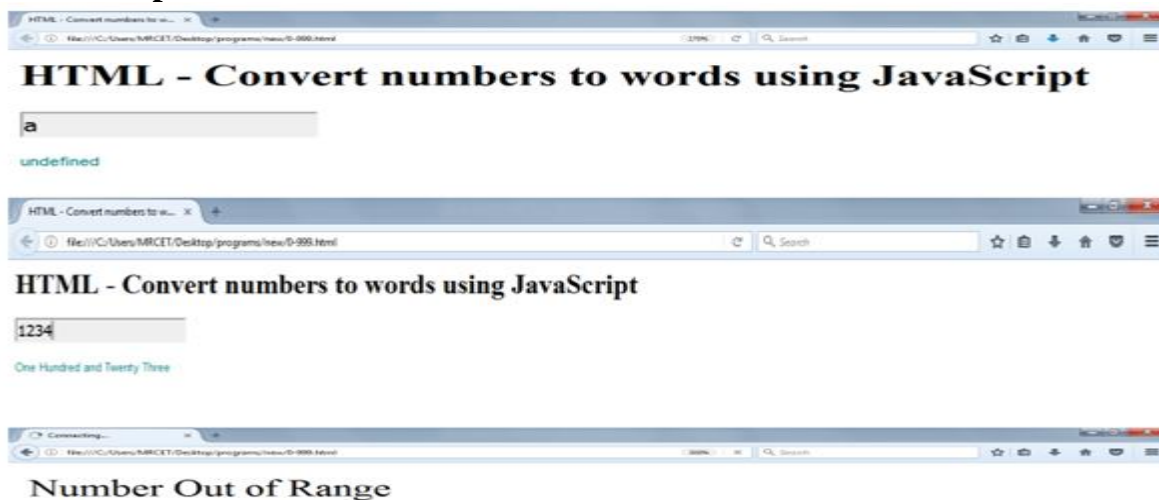
</head>
<body>
  <h1>HTML - Convert numbers to words using JavaScript</h1>
  <input id="Text1" type="text" onkeypress="return onlyNumbers(this.value);"
onkeyup="NumToWord(this.value,'divDisplayWords');" maxlength="4"
style="background-color:#efefef; border: 2px solid #CCCCC; font-size: large" />
  <br />
  <br />
  <div id="divDisplayWords" style="font-size: 27; color: Teal; font-family:
Arial;"></div>
</body>
</html>

```

Expected Output:



Actual Output:



Experiment-3

AIM: Develop and demonstrate JavaScript with POP-UP boxes and functions for the following problems:

- a) Input: Click on Display Date button using on click () function Output: Display date in the textbox
- b) Input: A number n obtained using prompt Output: Factorial of n number using alert
- c) Input: A number n obtained using prompt Output: A multiplication table of numbers from 1 to 10 of n using alert
- d) Input: A number n obtained using prompt and add another number using confirm Output: Sum of the entire n numbers using alert

Description:

JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

Alert Box:

An alert box is often used if you want to make sure information comes through to the user. When an alert box pops up, the user will have to click "OK" to proceed.

Confirm Box:

A confirm box is often used if you want the user to verify or accept something. When a confirm box pops up, the user will have to click either "OK" or "Cancel" to proceed.

Prompt Box:

A prompt box is often used if you want the user to input a value before entering a page. When a prompt box pops up, the user will have to click either "OK" or "Cancel" to proceed after entering an input value.

SOURCE CODE:

Date.html

```
<html>
<body>
  <script>
    function display()
    {
      var x="You have clicked";
      var d=new Date();
      var date=d.getDate();
      var month=d.getMonth(); month++;
      var year=d.getFullYear();
      document.getElementById("dis").value=date+"/"+month+"/"+year;
    }
  </script>
</form>
```

```

        <br/>
        <input type="text" id="dis" /><br /><br>
        <input type="button" value="Display Date" onclick="display()" />
    </form>
</body>
</html>

```

Expected Output:



Actual Output:



Factorial.html

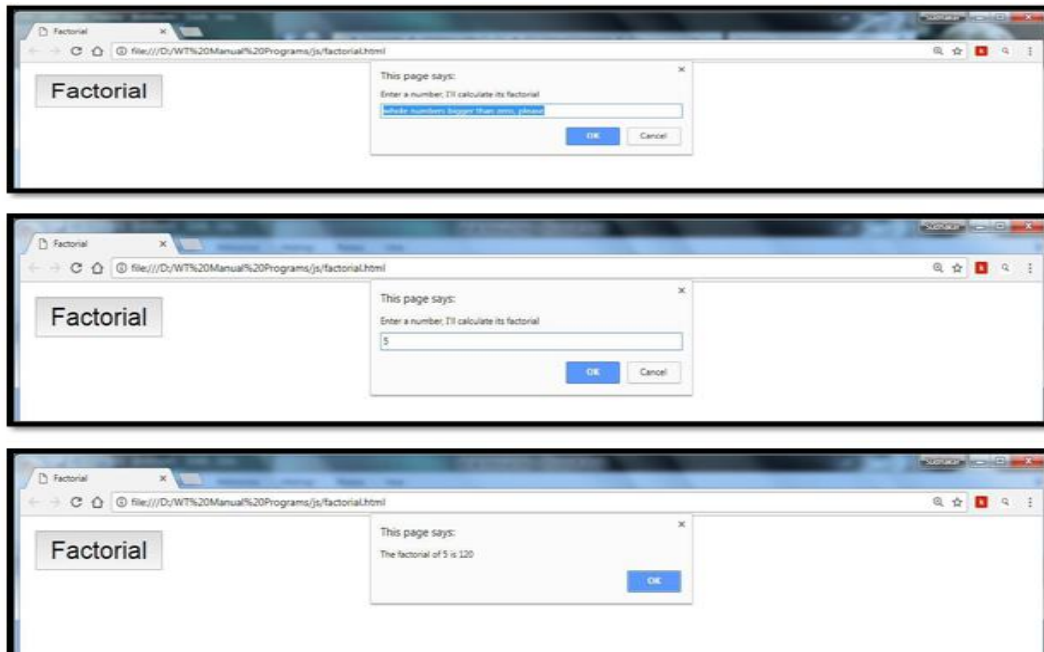
```

<html>
<head>
    <title>factorial</title>
    <script language='javascript'>
        function factorialcalc()
        {
            number = parseInt(prompt("Enter a number" , "Enter a natural number"));
            factorial = 1;
            for (i=1; i <= number; i++)
            {
                factorial = factorial * i;
            }
            alert("The factorial of " + number + " is " + factorial);
        }
    </script>
</head>
<body>
    <form name="form" method="get">

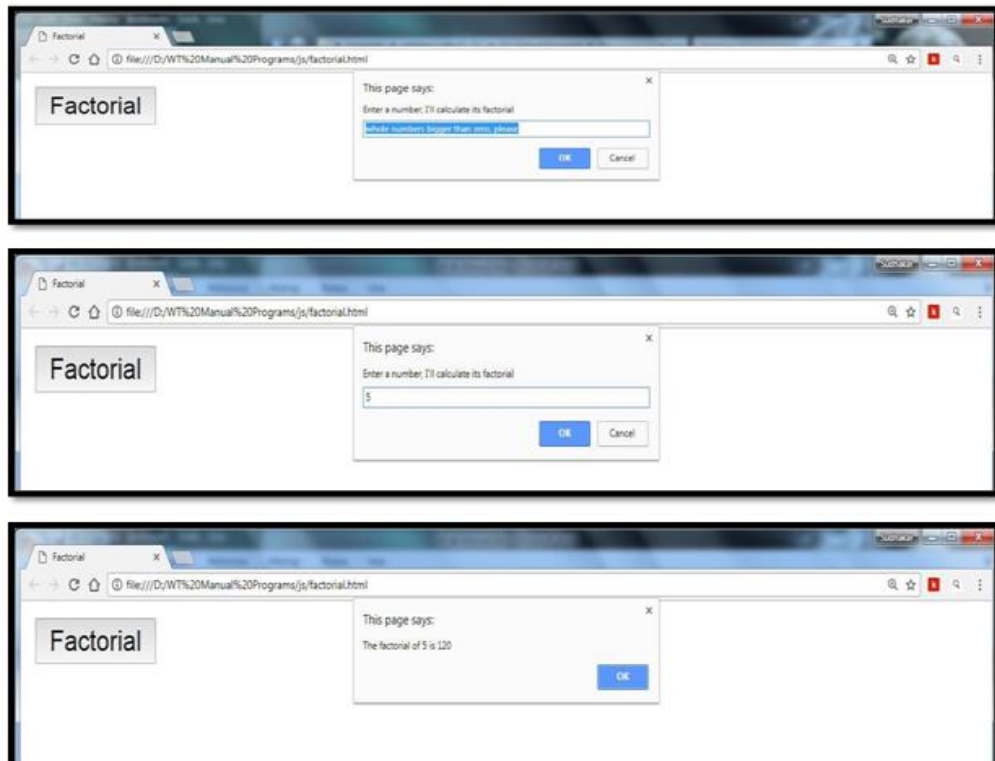
```

```
<input type="button" value='Factorial' onclick="factorialcalc();">
</form>
</body>
</html>
```

Expected Output:



Actual output:

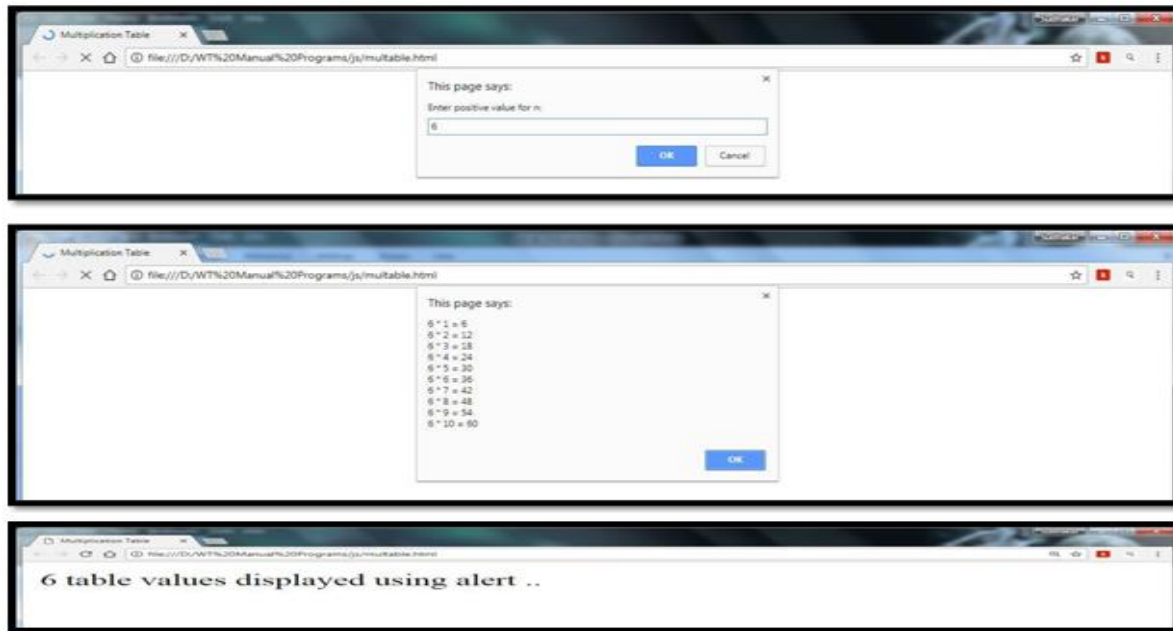


Multiplicationtable.html

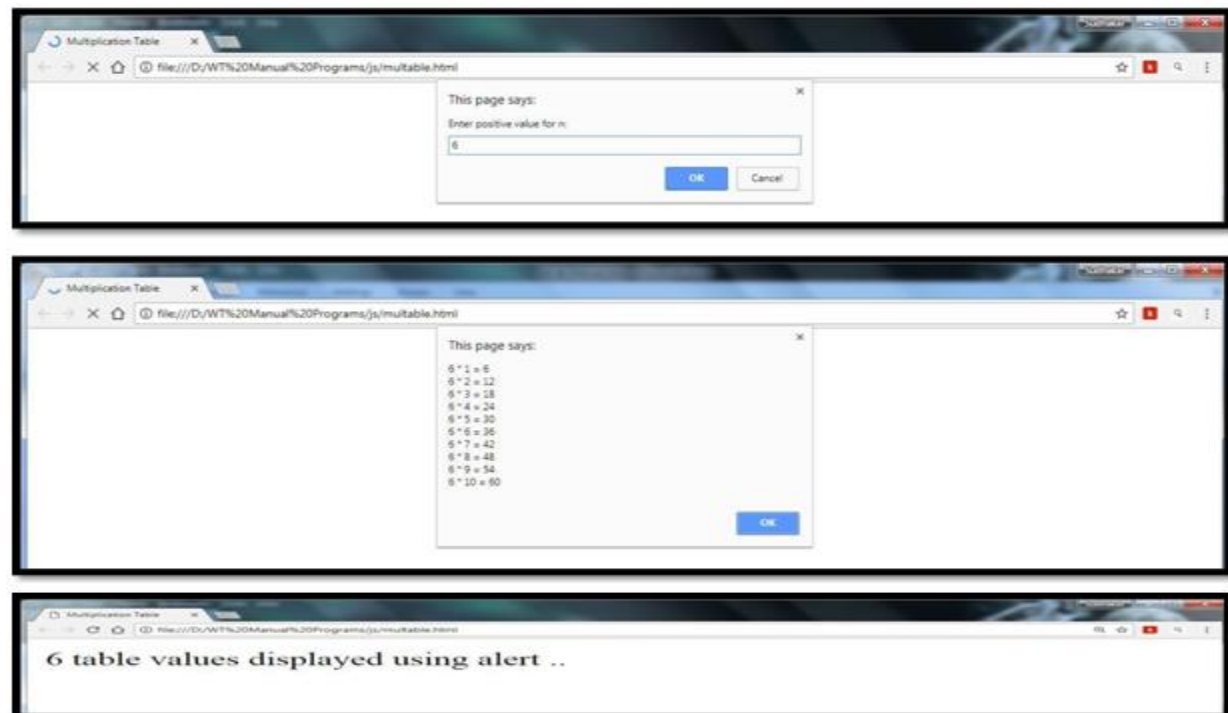
```
<html>
<head>
  <title> Multiplication Table </title>
</head>
<body>
  <script type="text/javascript">
    <!--
      var n=prompt("Enter positive value for n: ", " ");
      if(!isNaN(n))
      {
        var table="";
        var number="";
        for(i=1;i<=10;i++)
        {
          number = n * i;
          table += n + " * " + i + " = " + number + "\n";
        }
        alert(table);
      }
      else { }
      document.write(n+" table values displayed using alert ..<br />");
    // -->
```

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

Expected Output:



Actual Output:



Sumofnumbers.html

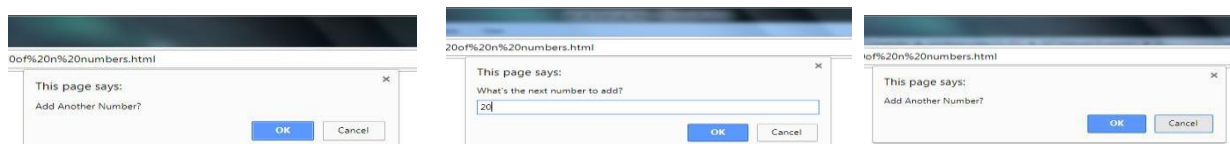
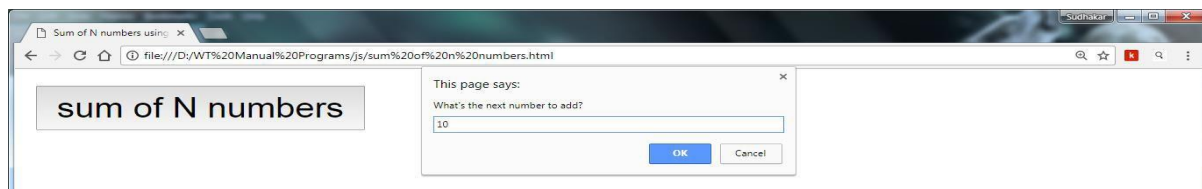
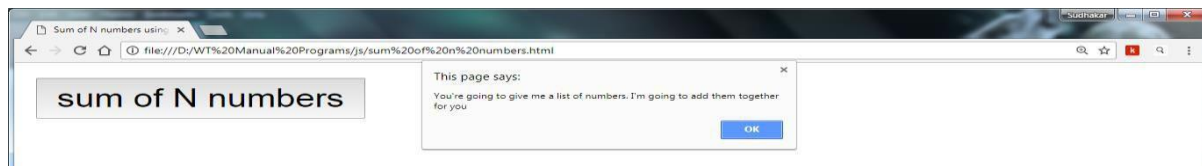
```
<html>
```

```

<head>
  <title>Sum of n numbers using Pop-up boxes</title>
  <script language='javascript'>
    function addsum()
    {
      alert("You're going to give me a list of numbers. I'm going to add them");
      var keepgoing = true;
      var sumofnums = 0 ;
      while (keepgoing)
      {
        sumofnums = sumofnums + parseInt(prompt("what's the next number to
add?", "")) ;
        keepgoing = confirm("add another number?");
      }
      alert("the sum of all your numbers is " + sumofnums);
    }
  </script>
</head>
<body>
  <form name=frm>
    <input type=button value='sum of n numbers' onclick="addsum();">
  </form>
</body>
</html>

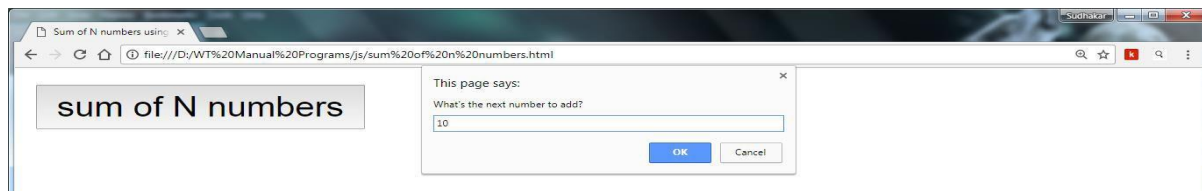
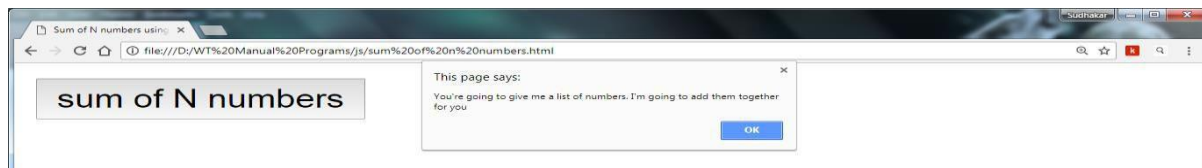
```

Expected output:





Actual output:



Experiment-4

AIM: Create a simple visual bean with a area filled with a color. The shape of the area depends on the property shape. If it is set to true then the shape of the area is Square and it is Circle, if it is false. The color of the area should be changed dynamically for every mouse click.

Description:

VISUAL BEANS: Create a simple visual bean with a area filled with a color. The shape of the area depends on the property shape. If it is set to true then the shape of the area is Square and it is Circle, if it is false. The color of the area should be changed dynamically for every mouse click. The color should also be changed if we change the color in the “property window “.

Description

Create a New Bean Here are the steps that you must follow to create a new Bean:

1. Create a directory for the new Bean.
2. Create the Java source file(s).
3. Compile the source file(s).
4. Create a manifest file.
5. Generate a JAR file.
6. Start the BDK.
7. Test

SOURCE CODE:

```
import java.awt.*;
import java.awt.event.*;
public class Colors extends Canvas
{
    transient private Color color;
    private boolean rectangular;
    public Colors()
    {
        addMouseListener(new MouseAdapter() {
            public void mousePressed(MouseEvent me) {
                change();
            }
        });
        rectangular = false;
        setSize(200, 100);
        change();
    }
    public boolean getRectangular()
```

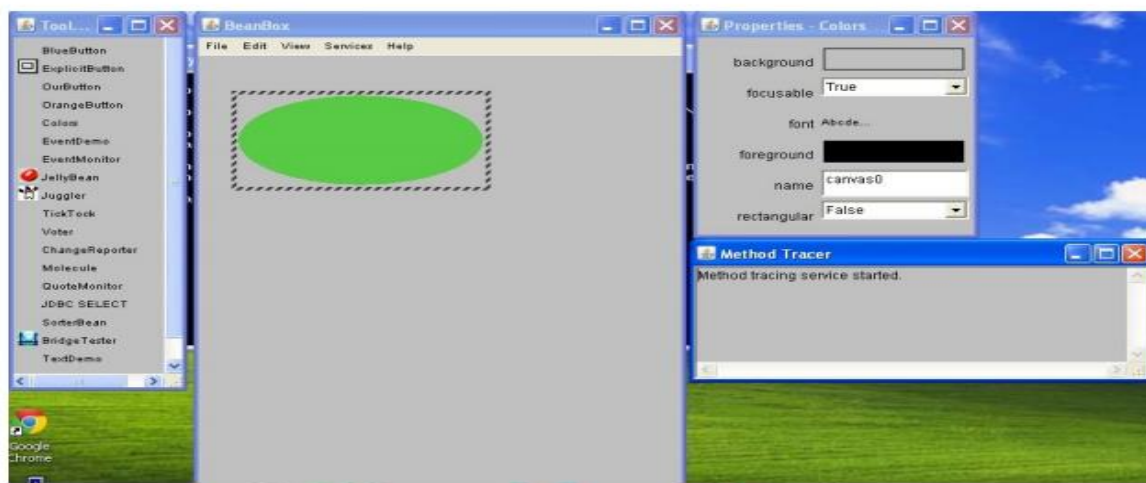
```

{
return rectangular;
}
public void setRectangular(boolean flag)
{
this.rectangular = flag;
repaint();
}
public void change()
{
color = randomColor();
repaint();
}
private Color randomColor()
{
int r = (int)(255*Math.random());
int g = (int)(255*Math.random());
int b = (int)(255*Math.random());
return new Color(r, g, b);
}
public void paint(Graphics g)
{
Dimension d = getSize();
int h = d.height;
int w = d.width;
g.setColor(color);
if(rectangular)
{
g.fillRect(0, 0, w-1, h-1);
}
else
{
g.fillOval(0, 0, w-1, h-1);
}
}
}

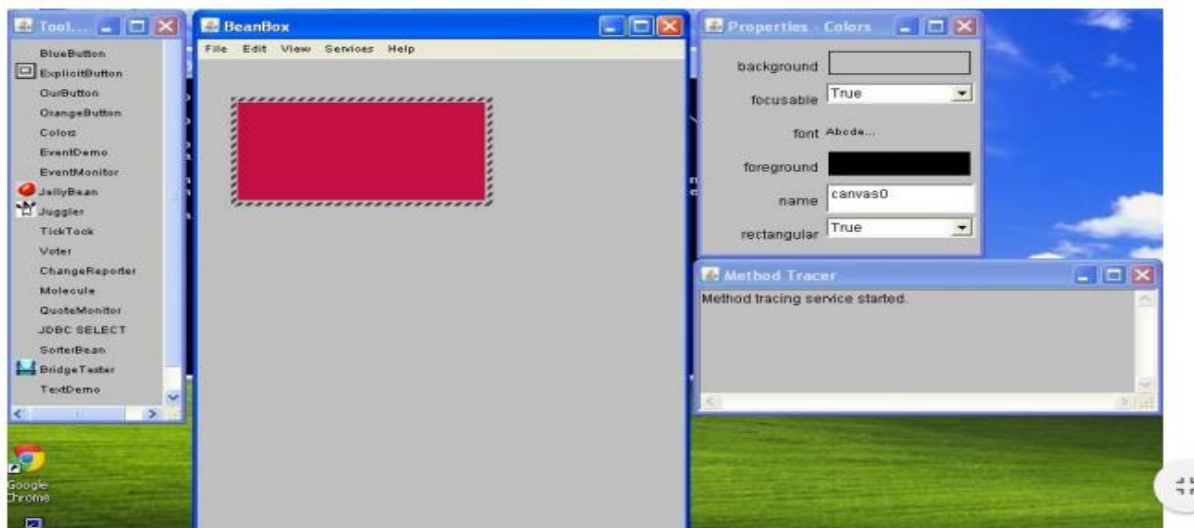
```

Actual Output:

Screen shot for circle:



Screen shot for triangle:



Experiment-5

AIM: Create an XML document that contains 10 users information. Write a Java Program, which takes User Id as input and returns the user details by taking the user information from XML document using DOM parser or SAX parser.

Description:

DOM parser is intended for working with XML as an object graph (a tree like structure) in memory – so called “Document Object Model (DOM)“. In first, the parser traverses the input XML file and creates DOM objects corresponding to the nodes in XML file. These DOM objects are linked together in a tree like structure.

- The HTML defines a standard way for accessing and manipulating HTML documents. It presents an HTML document as a tree-structure.
- The XML DOM defines a standard way for accessing and manipulating XML documents. It presents an XML document as a tree-structure.

SOURCE CODE:

UserDom.java

```
import java.io.File;
import javax.xml.parsers.*;
import org.w3c.dom.*;
import java.util.Scanner;

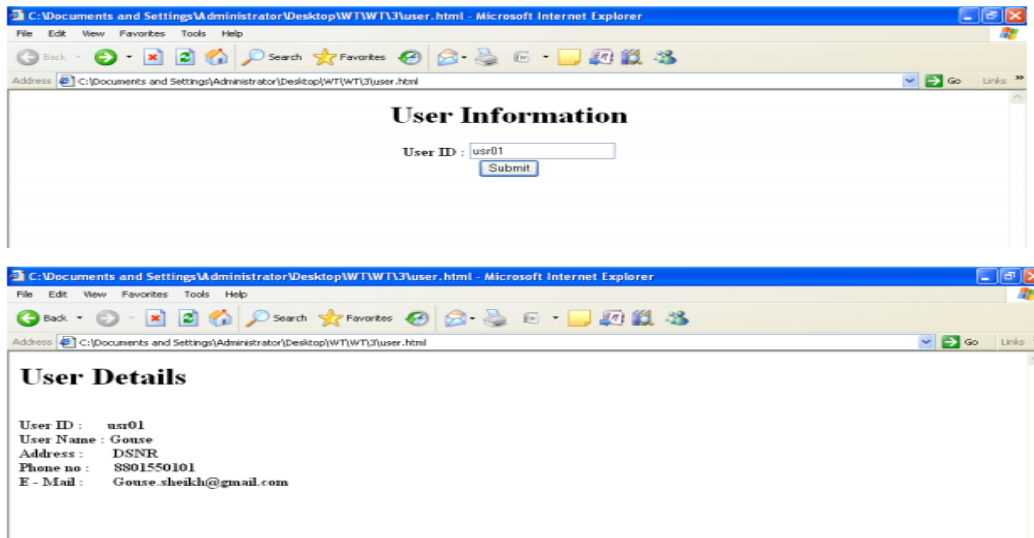
public class UserDom
{
    public static void main(String args[]) throws Exception
    {
        DocumentBuilderFactory fac=DocumentBuilderFactory.newInstance();
        DocumentBuilder b=fac.newDocumentBuilder();
        Document doc=b.parse(new File("C:\\Users\\Admin\\Documents\\NetBeansProjects\\
        UserDom\\src\\userdom\\user.xml"));
        doc.getDocumentElement().normalize();
        Element root=doc.getDocumentElement();
        Scanner in=new Scanner(System.in);
        System.out.println("Enter User ID:");
        int n=in.nextInt();
        int flag=0;
        NodeList nl=doc.getElementsByTagName("user");
        for(int i=0;i<nl.getLength();i++)
        {
            Node node=nl.item(i);
            if(node.getNodeType()==Node.ELEMENT_NODE)
            {
                Element e=(Element)node;
                int
```



```
<usersinformation>
  <user>
    <rollno>501</rollno>
    <name>aaa</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>502</rollno>
    <name>bbb</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>503</rollno>
```

```
<name>ccc</name>
<branch>cse</branch>
<college>mrcet</college>
</user>
<user>
  <rollno>504</rollno>
  <name>ddd</name>
  <branch>cse</branch>
  <college>mrcet</college>
</user>
<user>
  <rollno>505</rollno>
  <name>eee</name>
  <branch>cse</branch>
  <college>mrcet</college>
</user>
<user>
  <rollno>506</rollno>
  <name>fff</name>
  <branch>cse</branch>
  <college>mrcet</college>
</user>
<user>
  <rollno>508</rollno>
  <name>hhh</name>
  <branch>cse</branch>
  <college>mrcet</college>
</user>
</usersinformation>
```

OUTPUT:



Experiment-6

AIM: Develop and demonstrate PHP Script for the following problems:

- Write a PHP Script to find out the Sum of the Individual Digits.
- Write a PHP Script to check whether the given number is Palindrome or not

Description:

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. PHP is a recursive acronym for "PHP: Hypertext Preprocessor". PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. PHP is forgiving: PHP language tries to be as forgiving as possible.

Sumofdigits.php

```
<form method="post">
<p>Enter a Number</p>
<input type="text" name="num" />
<button type="submit"> Sum Of Digits</button>
</form>
```

```
<?php
if ($_POST)
{
    $num=$_POST['num'];
    $sum=0;
```

```

while($num>0)
{
    $r=$num%10;
    $sum+=$r;
    $num=$num/10;
}
echo "sum of individual digits are: $sum";
}
?>

```

Output:



Palindrome.php

```

<form method="post">
<p>Enter a Number</p>
<input type="text" name="num" />
<button type="submit"> check</button>
</form>
<?php
    if ($_POST)
    {
        $num=$_POST['num'];
        $reverse= strrev($num);
        if($num == $reverse)
        {
            echo "The number $num is pallindrome";
        }
        else
        {
            echo "The number $num is not a pallindrome";
        }
    }
?>

```

Output:



Experiment-7

AIM: Implement the following in CSS

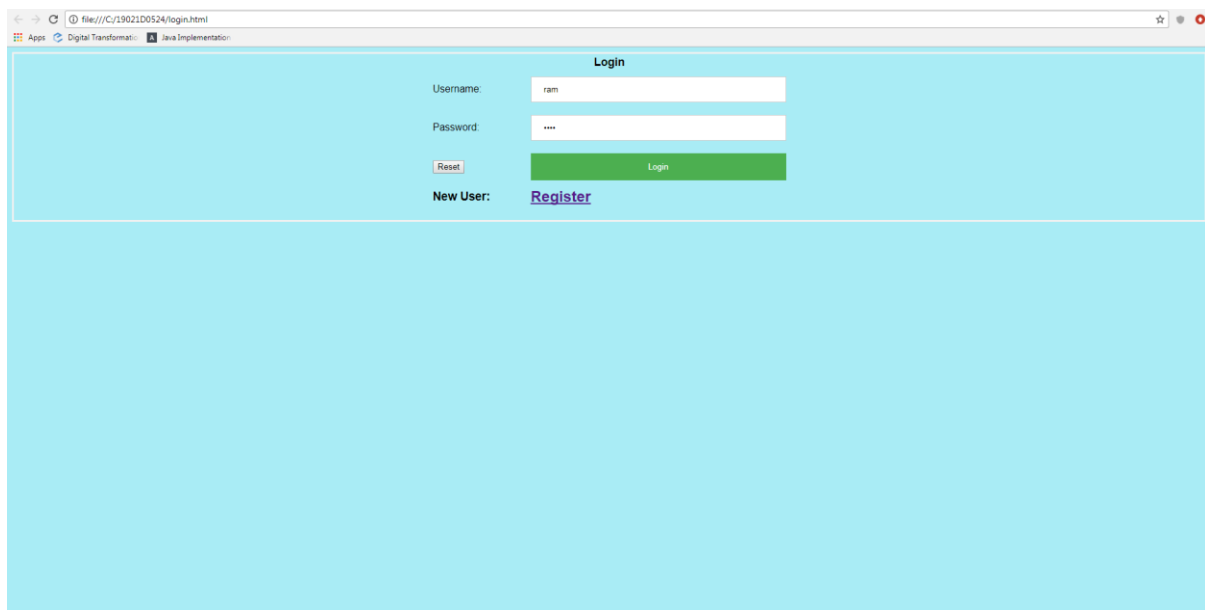
- a) Implementation of 'get' and 'post' methods.
- b) Implementation in colors, boarder padding.
- c) Implementation button frames tables, navigation bars.

a)Implement of get and post methods

```
<html>
<head>
<style>
  h1
  {
    color: skyblue
    text-align: center
  }
  p
  {
    color: gold
    font-size: 100x
  }
</style>
<title>Login Page</title>
</head>
```

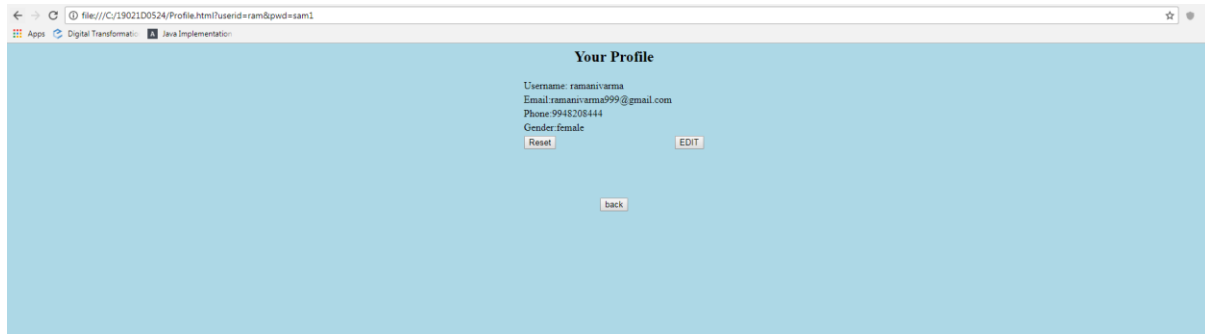
```
<body>
<center>
<form name="loginForm" method="get" action="Profile.html" >
<h1> Login Page</h1>
<p>Username:</p>
<input type="text" size=25 name="userid">
<p>Password:</p>
<input type="Password" size=25 name="pwd">
<input type="Reset" value = "reset">
  <button type="submit">Login</button>
</form>
</center>
</body>
</html>
```

Actual Outputs:

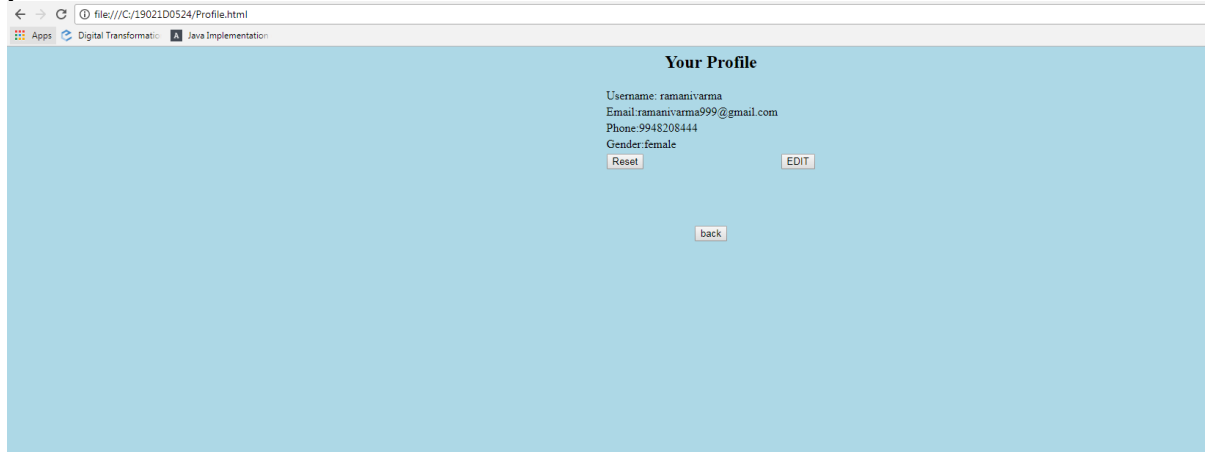


The screenshot shows a web browser window with the address bar displaying "file:///C:/19021D0524/login.html". The page content is a login form titled "Login" centered on a light blue background. The form includes a "Username:" label with a text input field containing "ram", a "Password:" label with a password input field containing "****", a "Reset" button, and a green "Login" button. Below the form, there is a "New User:" label followed by a blue, underlined "Register" link.

get



post



b) Implementation of colors boarder and padding

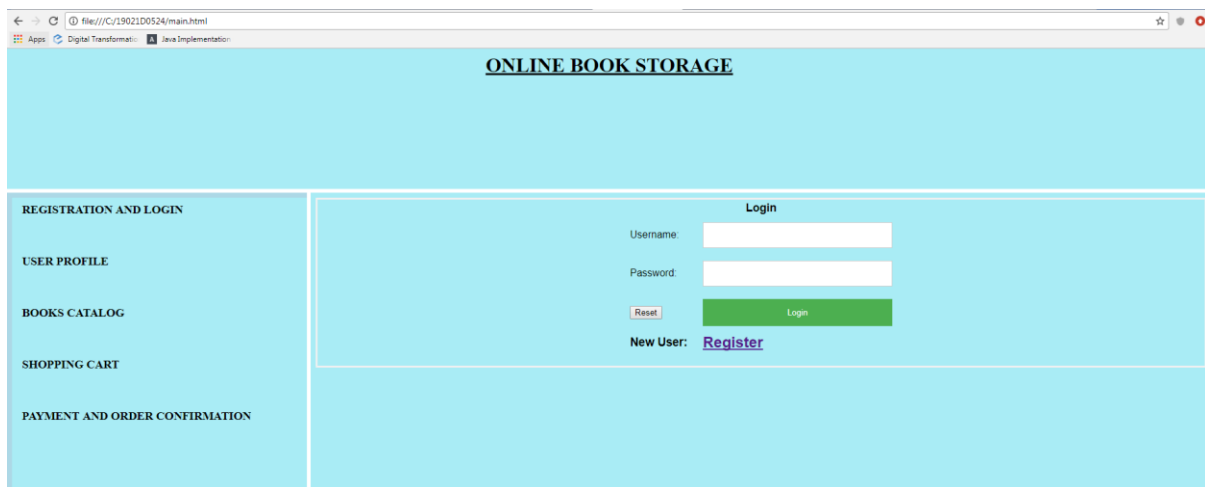
```
<html>
<head>
<style>
body {font-family: Arial, Helvetica, sans-serif;}
form {border: 3px solid #f1f1f1;}
input[type=text], input[type=password]
{
  width: 100%;
  padding: 12px 20px;
  margin: 8px 0;
  display: inline-block;
  border: 1px solid #ccc;
  box-sizing: border-box;
}
button {
  background-color: #4CAF50;
  color: white;
  padding: 14px 20px;
  margin: 8px 0;
  border: none;
```

```

    cursor: pointer;
    width: 100%;
}
</style>
<title>Login Page</title>
</head>
<body bgcolor = "#a9ecf5">
<form name="loginForm" method="get" action="Profile.html" >
<table width="30%" align="center">
<tr>
<td colspan=2><center><font size=4><b>Login</b></font></center></td></tr>
<tr>
<td>Username:</td>
<td><input type="text" size=25 name="userid"></td></tr>
<tr>
<td>Password:</td>
<td><input type="Password" size=25 name="pwd"></td></tr>
<tr>
<td><input type="Reset"></td>
<td><button type="submit">Login</button></td></tr>
<tr>
<td><h3>New User:</h3></td>
<td><a href="registration.html" ><h2><b>Register</b></h2></a></td>
</table>
</form>
</body>
</html>

```

Actual Output:



c) Implementation of buttons, frames, tables, navigation bars

shopping.html


```

<html>
<head>
<link rel="stylesheet" type="text/css" href="style.css"/>
<title>Shopping Cart</title>

</head>
<body bgcolor="lightblue">
<h2 align="center">Your Cart</h2>
<div>
<form name="catalog" action="Payment.html" method="post">
<table width="100%" align="center" id = "customers">

<tr>
<th> Bookname</th>
<th>Price</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
<tr>
<td align="center">JAVA</td>
<td align="center">Rs.530</td>
<td align="center">1</td>
<td align="center">Rs.530</td>
</tr>
<tr>
<td align="center">MST</td>
<td align="center">Rs.900</td>
<td align="center">1</td>
<td align="center">Rs.900</td>
</tr>
<tr>
<td align="center">Machine learning</td>
<td align="center">Rs.300</td>
<td align="center">2</td>
<td align="center">Rs.600</td>
</tr>
</table></br></br></br></br>
<center><button type="submit" action="Payment.html" value="buy">BUY</button></center>
</form>
</div>

</body>
</html>

```

style.css

```

#customers {
  font-family: "Trebuchet MS", Arial, Helvetica, sans-serif;
  border-collapse: collapse;
  width: 100%;
}

```

```

#customers td, #customers th {
  border: 1px solid #ddd;
  padding: 8px;
}
#customers tr:hover {background-color: #ddd;}

#customers th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: left;
  background-color: #4CAF50;
  color: white;
}
button {
  background-color: #4287f5;
  color: white;
  padding: 14px 20px;
  margin: 8px 0;
  border: none;
  cursor: pointer;
  width: 10%;
}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 100%;
  background-color: #a9ecf5;
  position: fixed;
  height: 100%;
  overflow: auto;
}
li a {
  display: block;
  color: #000;
  padding: 8px 16px;
  text-decoration: none;
}
li a:hover:not(.active) {
  background-color: #ffffff;
}

```

Actual Output:

Your Cart			
Bookname	Price	Quantity	Amount
JAVA	Rs.530	1	Rs.530
MST	Rs.900	1	Rs.900
Machine learning	Rs.300	2	Rs.600
<div>BUY</div>			

Experiment-8

AIM: Implement the web applications with Database using

- a) PHP,
- b) Servlets and
- c) JSP.

Description:

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

- It stands for Java Server Pages.
- It is a server side technology.

- It is used for creating web application.
- It is used to create dynamic web content.
- In this JSP tags are used to insert JAVA code into HTML pages.
- It is an advanced version of Servlet Technology.
- It is a Web based technology helps us to create dynamic and platform independent web pages.
- In this, Java code can be inserted in HTML/ XML pages or both.
- JSP is first converted into servlet by JSP container before processing the client's request.

Login.html

```
<html>
<head> <title> Login Page </title> </head>
<body>
<center> <h1> Login Page </h1>
<form method="post" action="loginform.php">
<table>
<tr> <td> <label> Name: </label> </td>
<td> <input type="text" name="uname" /> </td>
</tr>
<tr> <td> <label> Password: </label> </td>
<td> <input type="password" name="upwd" /> </td>
</tr>
<tr> <td> <input type="submit" value="submit" /> </td>
<td> <input type="reset" value="reset" /> </td>
</tr>
</table>
</form>
</center>
</body>
</html>
```

Db.php

```
<html>
<body>
<?php
$servername="localhost";
$username="root";
$password="";

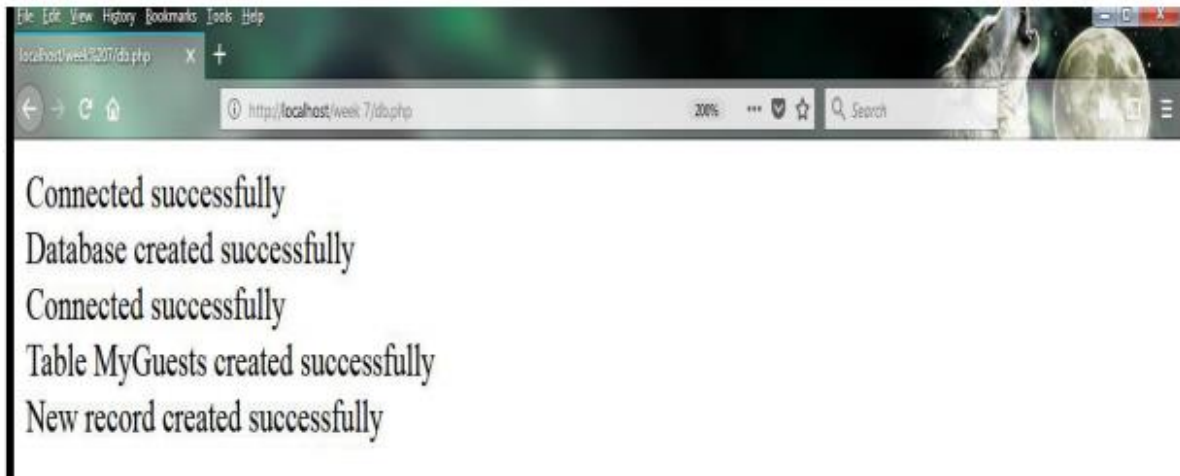
$conn=new mysqli($servername,$username,$password);
if($conn->connect_error)
{
die("connection failed".$conn->connect_error);
}
```

```

echo "Connected successfully <br>";
//Create database
$sql = "CREATE DATABASE reg";
if(mysqli_query($conn,$sql))
echo "Database created successfully<br>";
else
echo "error";
$servername="localhost";
$dbname="reg";
$conn = mysqli_connect($servername, $username, $password, $dbname);
// Check connection
if (!$conn)
{
die("Connection failed: " . mysqli_connect_error());
}
echo "Connected successfully <br>";
// sql to create table
$sql = "CREATE TABLE Guests (
name VARCHAR(30) NOT NULL,
pwd VARCHAR(30) NOT NULL)";
if (mysqli_query($conn, $sql))
{
echo "Table MyGuests created successfully<br>";
}
else {
echo "Error creating table: " . mysqli_error($conn);
}
$sql = "INSERT INTO Guests (name, pwd) VALUES ('ece', '5')";
if (mysqli_query($conn, $sql)) {
echo "New record created successfully";
}
else
{
echo "Error: " . $sql . "<br>" . mysqli_error($conn);
}
mysqli_close($conn);
?>
</body>
</html>

```

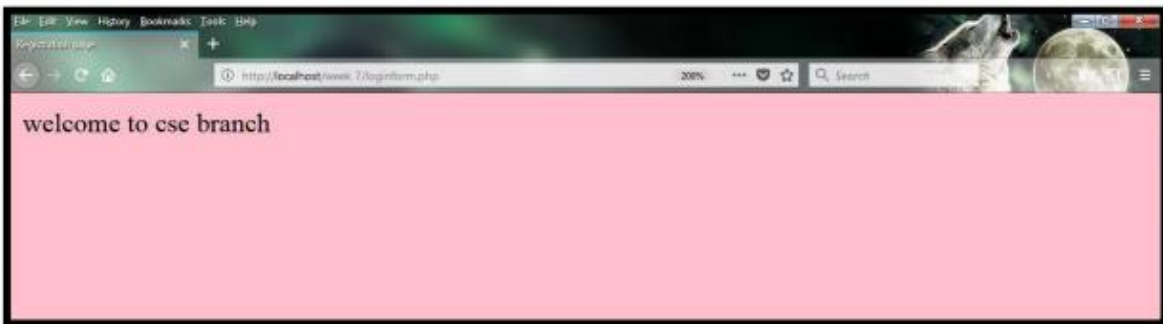
Output of db.php:



Loginform.php

```
<html>
<head> <title> Registration page </title> </head>
<body>
<?php
$name=(isset($_POST["uname"]));
$pwd=(isset($_POST["upwd"]));
$conn=mysqli_connect("localhost","root","") or die("mysql_error()");
mysqli_select_db($conn,"reg") or die("mysql_error()");
$query=mysqli_query($conn,"SELECT * from guests where name='$name' and pwd =
'$pwd'");
while($row=mysqli_fetch_array($query))
{
return mysqli_fetch_array($query);
}
if($pwd==$pwd && $name==$name)
echo "welcome $name branch";
else
echo "invalid user";
?>
</body>
</html>
```

OUTPUT:



(b) USING SERVLET

DBExample.java

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

import java.util.*;

import java.sql.*;

```
public class DBExample extends HttpServlet{
    public void doGet(HttpServletRequest request,
        HttpServletResponse response)
        throws ServletException, IOException
    {
        String JDBC_DRIVER="com.mysql.jdbc.Driver";
        String DB_URL="jdbc:mysql://localhost/csec";
        String USER = "root";
        String PASS = "TIGER";
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html><body><h1>Welcome to MRCET</h1>\n");
        try{
            Class.forName("com.mysql.jdbc.Driver");
            Connection conn = DriverManager.getConnection(DB_URL,
```

```

USER, PASS);
Statement stmt = conn.createStatement();
String sql;
sql = "SELECT * FROM Emp";
ResultSet rs = stmt.executeQuery(sql);
while(rs.next()){
out.println("ID: " + rs.getString(1));
out.println("Age: " + rs.getString(2));
out.println("First Name: " + rs.getString(3)+"<br>");
}
rs.close();
stmt.close();
conn.close();
}catch(SQLException se){
out.println(se.getMessage());
}catch(Exception e){
out.println(e.getMessage());
}
out.println("</body></html>");
}
}

```

web.xml:

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app>
<servlet>
<servlet-name>DBExample</servlet-name>
<servlet-class>DBExample</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>DBExample</servlet-name>
<url-pattern>/db</url-pattern>
</servlet-mapping>
</web-app>

```

OUTPUT:

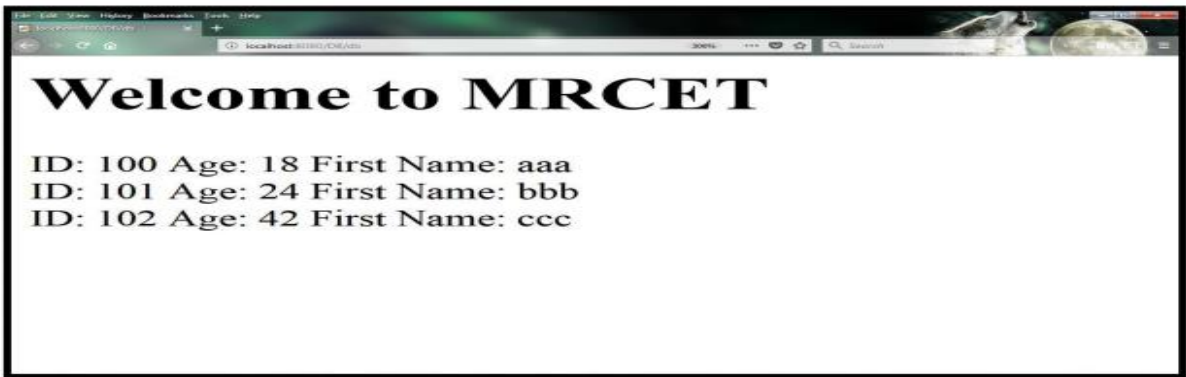


c) JSP

USING JSP

```
import java.sql.*;
class MysqlCon{
public static void main(String args[]){
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/sonoo","root","root");
//here sonoo is database name, root is username and password
Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("select * from emp");
while(rs.next())
System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));
con.close();
}catch(Exception e){ System.out.println(e);}
}
}
```

OUTPUT:



Experiment-9

AIM: Write a program to design a simple calculator using

- a) JavaScript
- b) PHP
- c) Servlet and
- d) JSP.

Description:

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

- It stands for Java Server Pages.
- It is a server side technology.
- It is used for creating web application.
- It is used to create dynamic web content.
- In this JSP tags are used to insert JAVA code into HTML pages.
- It is an advanced version of Servlet Technology.
- It is a Web based technology helps us to create dynamic and platform independent web pages.
- In this, Java code can be inserted in HTML/ XML pages or both.
- JSP is first converted into servlet by JSP container before processing the client's request.

Calculator.html

```
<html>
<head>
  <title>Calculator</title>
  <script language="javascript">
    var inputstring="";
    function updatestring(value)
    {
      inputstring=inputstring+value;
      document.calculator.input.value=inputstring;
    }
  </script>
</head>
<body>
  <form name="calculator">
    <table border="4" align="center" bgcolor="pink" bordercolor="black">
      <tr>
        <td colspan="4"><input type="text" name="input" maxlength="15"
size="27"></td>
```

```

</tr>
<tr>
<td><input type="button" value="clear" onclick="input.value='';inputstring=' '></td>
  <td><input type="button" value="mod" onclick="updatestring('%')"></td>
  <td><input type="button" value="*" onclick="updatestring('*")"></td>
</tr>
<tr>
  <td><input type="button" value="7" onclick="updatestring('7')"></td>
  <td><input type="button" value="8" onclick="updatestring('8')"></td>
  <td><input type="button" value="9" onclick="updatestring('9')"></td>
  <td><input type="button" value="/" onclick="updatestring('/')"></td>
</tr>
<tr>
  <td><input type="button" value="4" onclick="updatestring('4')"></td>
  <td><input type="button" value="5" onclick="updatestring('5')"></td>
  <td><input type="button" value="6" onclick="updatestring('6')"></td>
  <td><input type="button" value="-" onclick="updatestring('-")"></td>
</tr>
<tr>
  <td><input type="button" value="1" onclick="updatestring('1')"></td>
  <td><input type="button" value="2" onclick="updatestring('2')"></td>
  <td><input type="button" value="3" onclick="updatestring('3')"></td>
  <td><input type="button" value="+" onclick="updatestring('+')"></td>
</tr>
<tr>
  <td><input type="button" value="0" onclick="updatestring('0')"></td>
  <td><input type="button" value="00" onclick="updatestring('00')"></td>
  <td><input type="button" value="." onclick="updatestring('.')"></td>
  <td><input type="button" value="="
onclick="input.value=eval(inputstring);"></td>
</tr>
</table>
</form>
</body>
</html>

```

OUTPUT:



Index.php

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Simple Calculator using PHP</title>
```

```
</head>
```

```
<body>
```

```
<form name="f1" action="index.php" method="post">
```

```
<p>1st Number</p><input type="text" name="t1">
```

```
<p>2nd Number</p><input type="text" name="t2">
```

```
<p><input type="submit" value="Add" name="add" />
```

```
<input type="submit" value="Subtract" name="sub" />
```

```
<input type="submit" value="Multiply" name="mul" />
```

```
<input type="submit" value="Divide" name="div" /></p>
```

```
</form>
```

```
<?php
```

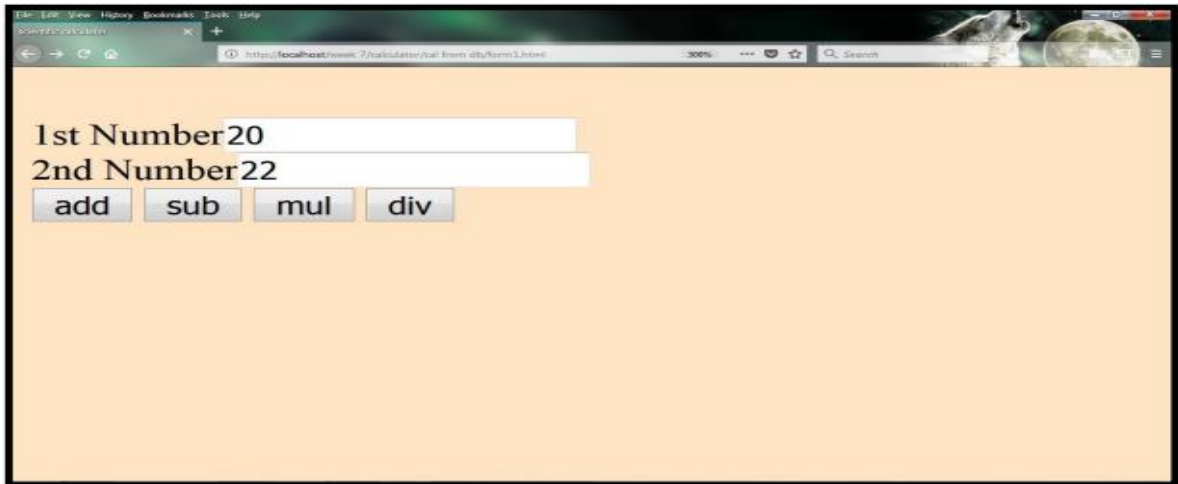
```
$a = $_POST['t1'];
```

```
$b = $_POST['t2'];
```

```
if (isset($_POST['add']))
```

```
{
    $c = $a + $b;
    print "The sum is: ";
    print $a . "+" . $b . "=" . $c;
}
if (isset($_POST['sub']))
{
    $c = $a - $b;
    print "The difference is: ";
    print $a . "-" . $b . "=" . $c;
}
if (isset($_POST['mul']))
{
    $c = $a * $b;
    print "The produce is: ";
    print $a . "*" . $b . "=" . $c;
}
if (isset($_POST['div']))
{
    $c = $a / $b;
    print "The quotient is: ";
    print $a . "/" . $b . "=" . $c;
}
?>
</body>
</html>
```

Output:



(c) USING SERVLETS

index.html

```
<html>
<head>
<title>Simple Calculator</title>
</head>
<body>
<h3>Please Enter Two Numbers :::</h3>
<form method="GET" action="http://localhost:8080/Cal/calc">
  Number:<input type="text" id="t1" name="t1"/><br/>
  <select name="op">
    <option value="+">+</option>
    <option value="-">-</option>
    <option value="*">*</option>
    <option value="/">/</option>
    <option value="%">%</option>
  </select>
  <br/>
  Number:<input type="text" id="t2" name="t2">
  <input type="submit" value="calculate"/></br>
```

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

Cal.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class Cal extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter pw= response.getWriter();
        int n1 = Integer.parseInt(request.getParameter("t1"));
        int n2 = Integer.parseInt(request.getParameter("t2"));
        String op=request.getParameter("op");
        if(op.equals("+")){pw.println("Addition :::"+(n1+n2));}
        else if(op.equals("-")){pw.println("Subtraction :::"+(n1-n2));}
        else if(op.equals("*")){pw.println("Multiplication :::"+(n1*n2));}
        else if(op.equals("/")){pw.println("Division :::"+(n1/n2));}
        else{pw.println("Remainder :::"+(n1%n2));}
        pw.close();
    }
}
```

web.xml

```
<web-app>
<servlet>
<servlet-name>Calculator</servlet-name>
<servlet-class>Cal</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Calculator</servlet-name>
<url-pattern>/calc</url-pattern>
</servlet-mapping>
</web-app>
```

Output:

The first screenshot shows a web browser at localhost:8080/Calc/ with the heading "Please Enter Two Numbers :::". It contains two input fields: "Number: 25" and "Number: 24". Between them is a small box with "+" and "-" operators. A "calculate" button is to the right of the second input field.

The second screenshot is identical to the first, but the operator box now contains "*" and "/" operators.

The third screenshot shows the results of the calculations. On the left, it says "Addition :::49". On the right, it says "Multiplication :::600".

calculator.html

```
</head>
<body>
<form action="calculator" method="get" name="frm">
  Enter num1:<input name="txt1" type="text" />
  Enter num2: <input name="txt2" type="text" />
  Operator
  <select name="op">
    <option value="Addition">Addition</option>
    <option value="Subtraction">Subtraction</option>
    <option value="multiplication">multiplication</option>
    <option value="division">division</option>
  </select>
  <input type="submit" value="submit" />
</form>
</body>
</html>
```


calculator.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class calculator extends HttpServlet
{
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        PrintWriter out = response.getWriter();
        String n1 = request.getParameter("txt1");
        String n2 = request.getParameter("txt2");
        String op = request.getParameter("op");
        if(op.equals("Addition")){
            out.println((Integer.parseInt(n1) + Integer.parseInt(n2)));
        }
        else if(op.equals("Subtraction")){
            out.println(Integer.parseInt(n1) - Integer.parseInt(n2));
        }
        else if(op.equals("multiplication")){
            out.println(Integer.parseInt(n1) * Integer.parseInt(n2));
        }
        else{
            out.println(Integer.parseInt(n1) / Integer.parseInt(n2));
        }
    }
}
```

Actual Output:

Enter num1:

Enter num2:

Operator

Experiment-10

AIM: Create registration and login forms with validations using Jscript query.

Description:

- We have created a simple HTML form with four fields- Name, Email, Password., and Confirm Password. There is a jQuery function for complete validation and user data get inserted through PHP script. Before inserting into database, sanitization and validation on email is done using PHP. Also, user input email get checked into database for it's existence, if it exist then, user must enter another email.
- **jQuery** is a JavaScript library designed to simplify HTML DOM tree traversal and manipulation, as well as event handling, CSS animation, and Ajax. It is free, open-source software using the permissive MIT License.

SOURCE CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <title>Create a Flat Login/Sign up Page with Validation, Styling & Semantics Of Forms jQuery Plugin</title>
    <link href="css/style.css" media="screen" rel="stylesheet">
    <link href="css/reset.css" media="screen" rel="stylesheet">
    <link
href='http://fonts.googleapis.com/css?family=Open+Sans:300italic,600italic,700italic,800italic,400,300,600,800' rel='stylesheet' type='text/css'>
    <script src="//ajax.googleapis.com/ajax/libs/jquery/1.10.2/jquery.min.js"></script>
<script src="js/validator.js"></script>
    <!--[if lt IE 9]>
<script src="dist/html5shiv.js"></script>
<![endif]-->

</head>
<div class="container">
    <div class="flat-design-form">
        <ul class="tabs">
            <li><a class="active" href="#login" id="login-tab" name="login-tab"><span id="login_icon"></span> Login</a></li>

            <li><a href="#register" id="register-tab" name="register-tab"><span id="signup_icon"></span> Register</a></li>
        </ul>
```

```

    <div class="form-display show" id="login">
    <h1>Login</h1>

    <form action="" method="post" novalidate="">
        <fieldset>
            <ul>
                <li>
                    <div class="item">
                        <input data-validate-length-range="6" name="name"
                            placeholder="Username" required="required" type=
                                "text">
                    </div>
                </li>

                <li>
                    <div class="item">
                        <input data-validate-length-range="6" name=
                            "password" placeholder="Password" required=
                                'required' type="password">
                    </div>
                </li>

                <li><input class="button-login" type="submit" value=
                    "Login"></li>
            </ul>
        </fieldset>
    </form>
</div>

    <div class="form-display hide" id="register">
    <h1>Register</h1>
    <form action="" method="post" novalidate="">
        <fieldset>
            <ul>
                <li>
                    <div class="item">
                        <input data-validate-length-range="6" name="name"
                            placeholder="Username" required="required" type=
                                "text">
                    </div>
                </li>
                <li>
                    <div class="item">
                        <input data-validate-length="6,8" name="password"
                            placeholder="Password" required='required' type=
                                "text">

```

```

        </div>
    </li>
    <li>
        <div class="item">
            <input class='email' name="email" placeholder="Email" required="required" type="email">
        </div>
    </li>
    <li>
        <div class="item">
            <label><input name="url" placeholder="Website link" required="required" type="url"></label>
        </div>
    </li>
    <li><input class="button-register" id='send' type="submit" value="Sign Up"></li>
</ul>
</fieldset>
</form>
</div>

```

Actual Outputs:

-
- [Login](#)
 - [Register](#)

Login

- -
 -

Register

- -
 -
 -
 -

Experiment-11

AIM: Jscript to retrieve student information from student database using database connectivity.

Description:

- For retrieve data from MySQL database using JSP first we have to create a table in data base.
- After create a table in the MySQL database you need to insert record or data on it.
- The SELECT statement is used to retrieve data from one or more tables:
- The SQL query for retrieve specific column.
- SELECT column_name(s) FROM table_name or we can use the * character to retrieve ALL columns from a table:
- SELECT * FROM table_name

Registration table:

```
CREATE TABLE registration
(
  uname varchar(25) NOT NULL,
  pass varchar(25) NOT NULL,
  email varchar(25) NOT NULL,
  phno bigint(10) NOT NULL,
  UNIQUE KEY (uname)
)
```

registration.html

```
<html>
  <head>
    <title> User Registration Page</title>
    <script language="javascript">
      function validate()
      {
        var nam = document.f1.uname.value;
        if(nam=="")
        {
          alert("Please enter name");
          document.f1.uname.focus;
          return false;
        }
        var pwd = document.f1.pass.value;
        if(pwd=="")
        {
          alert("Please enter Password");
```

```

        document.f1.pass.focus;
        return false;
    }
    var email = document.f1.email.value;
    if(email=="")
    {
        alert("Please enter youe email");
        document.f1.email.focus;
        return false;
    }
    var phno = document.f1.phone.value;
    len=phno.length
    if(phno==" " || len != 10)
    {
        alert("Please enter phno or should be strictly 10 digits");
        document.f1.phone.focus;
        return false;}
    }
</script>
</head>
<body>
    <br/><br/><br/>
    <center>
    <form name="f1" action="insertData.php" method="post"
    onsubmit="javascript:returnvalidate()">
    <table border="3" cellpadding="0" cellspacing="0">
    <tr>
    <td>
    <table cellspacing="10">
    <tr>
    <td colspan="2" align="center"><h2><u>User Registration
    Form</u></h2></td>
    </tr>
    <tr>
    <td> User Name</td>
    <td><input type="text" name="uname" size="50"></td>
    </tr>
    <tr>
    <td> Password</td>
    <td><input type="password" name="pass"
    size="50"></td></tr>
    <tr>
    <td> E-mail</td>
    <td><input type="text" name="email" size="50"></td>
    </tr>

```

```

        <tr>
            <td> Phone</td>
            <td><input type="text" name="phone" size="15"></td>
        </tr>
        <tr>
            <td colspan="2" align="center"><input type="submit"
            value="submit"></td>
        </tr>
    </table>
</td>
</tr>
</table>
</form>
</center>
</body>
</html>

```

insertData.php

```

<?php
$conn = mysql_connect("localhost","root","");
if($conn)
    echo "Connected to database!!!";
else
    echo "Failed to Connect:".mysql_error();
mysql_select_db("test",$conn) or die("No Database existing:".mysql_error());
if(isset($_REQUEST['uname']))
{
    $uname=$_REQUEST['uname'];
    $pass=$_REQUEST['pass'];
    $email=$_REQUEST['email'];
    $phno=(float)$_REQUEST['phone'];
    $query = "INSERT INTO registration
    VALUES('$uname','$pass','$email','$phno')";
    mysql_query($query);
    $result = mysql_query("select * from registration");
?>

<html>
<body>
<br/><br/><br/>
<p align="right"><a
href="registration.html">[Registration
Page]</a></p><center>
<font face="verdana" size="4">
<table border="1" cellpadding="0" cellspacing="0">

```

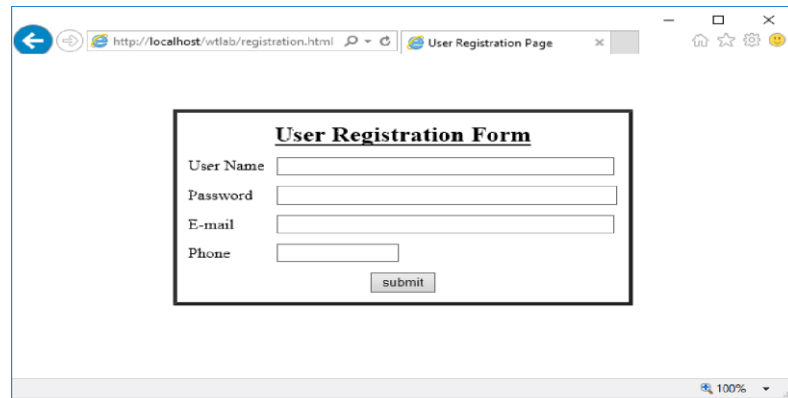
```

        <tr>
            <th colspan="4" align="center">User List</th>
        </tr>
        <tr>
            <th>S.No.</th>
            <th>User Name</th>
            <th>Email</th>
            <th>Phone</th>
        </tr>
        <?php $num=1; while($row = mysql_fetch_array($result))
        { ?>
            <tr>

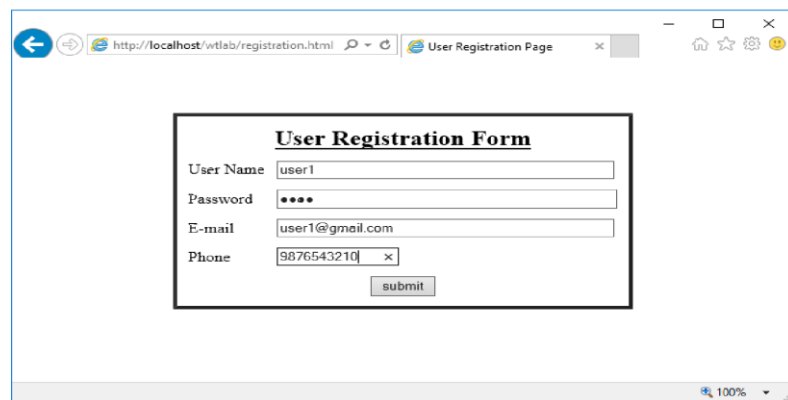
                <td><?php echo $num++;
                ?></td><td><?php echo
                $row['uname'];
                ?></td><td><?php echo
                $row['email']; ?></td>
                <td><?php echo $row['phno']; ?></td>
            </tr>
            <?php }?>
        </table>
    </center></body></html><?php } ?>

```



Actual Outputs:



A screenshot of a web browser window showing a "User Registration Form". The browser's address bar displays "http://localhost/vtllab/registration.html" and the tab is titled "User Registration Page". The form is enclosed in a black border and contains the following fields: "User Name", "Password", "E-mail", and "Phone", each with a corresponding text input box. A "submit" button is located at the bottom right of the form.



A screenshot of the same "User Registration Form" page, but with the input fields filled with data. The "User Name" field contains "user1", the "Password" field contains four dots, the "E-mail" field contains "user1@gmail.com", and the "Phone" field contains "9876543210". The "submit" button remains at the bottom right.



A screenshot of a web browser window showing a page titled "User List". The browser's address bar displays "http://localhost/vtllab/insertData.php" and the tab is titled "localhost". The page content includes the text "Connected to database!!!" and a link labeled "[Registration Page]". Below this is a table with the following data:

User List			
S.No.	User Name	Email	Phone
1	user1	user1@gmail.com	9876543210
2	user2	user2@gmail.com	9885123453
3	user3	user3@gmail.com	9885674321
4	user4	user4@gmail.com	9705675421

Experiment-12

AIM: Implement the following in React JS

- a) Using React Js creating constructs data elements.
- b) Using React Js implementations DoM.

Description:

The constructor is a method that is used for initializing the state of the object in the class. It calls automatically during the creation of an object in the class. The concept of the constructor is also the same in the React. The constructor in a React component is called before the component is mounted. When you implement the constructor for a React component, you have to call the **super(props)** method before any other statement. If you are not calling **super(props)** method, **this.props** will be undefined in the constructor and can lead to bugs.

Syntax:

```
Constructor(props){  
  super(props);  
}
```

In React, there are mainly two purposes for using the constructors:

- It is used for the initialization of the local state of the component by assigning an object to this state.
- It is used to bind the event handler method, which occurs in your component.
- If you are not initializing the state and not binding the methods for your React component, then it does not require implementing a constructor for a React component.
- The `setState()` method cannot call directly in the `constructor()`. If the component requires to use local state, you have to use `'this.state'` to assign the initial state in the constructor. The only constructor uses `this.state` for assigning the initial state, and all other methods require to use `set.state()` method.

a)App.js

```
import React, { Component } from 'react';  
class App extends Component {  
  constructor(props){  
    super(props);  
    this.state = {  
      data: 'Hello World'  
    }  
    this.handleClick = this.handleClick.bind(this);  
  }  
  handleClick(){  
    console.log(this.props);  
  }  
}
```

```

render() {
  return (
    <div className="App">
      <center>
        <h2>Example of React Constructor</h2>
        <input type="text" value={this.state.data}/>
        <br/><br/>
        <button onClick={this.handleClick}>Please Click</button> </center>
      </div>
    );
  }
}
export default App;

```

Main.js

```

import React from 'react';
import ReactDOM from 'react-dom';
import App from './App.js';
ReactDOM.render(<App />, document.getElementById('app'));

```

Expected Output:



Actual Output:



b) App.js

```

import React from 'react';

class App extends React.Component {
  render() {

```

```

        return (
            <div>
                <Header/>
                <Content/>
            </div>
        );
    }
}
class Header extends React.Component {
    render() {
        return (
            <div>
                <h1>Header</h1>
            </div>
        );
    }
}
class Content extends React.Component {
    render() {
        return (
            <div>
                <h2>Content</h2>
                <p>The content text!!!</p>
            </div>
        );
    }
}

```

Main.js

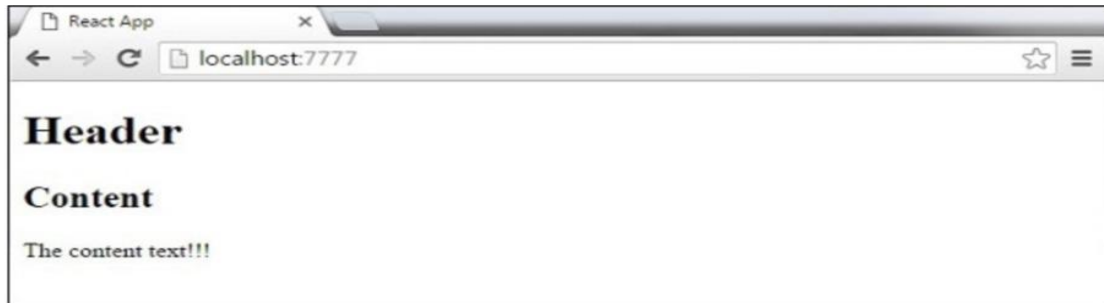
```

import React from 'react';
import ReactDOM from 'react-dom';
import App from './App.jsx';

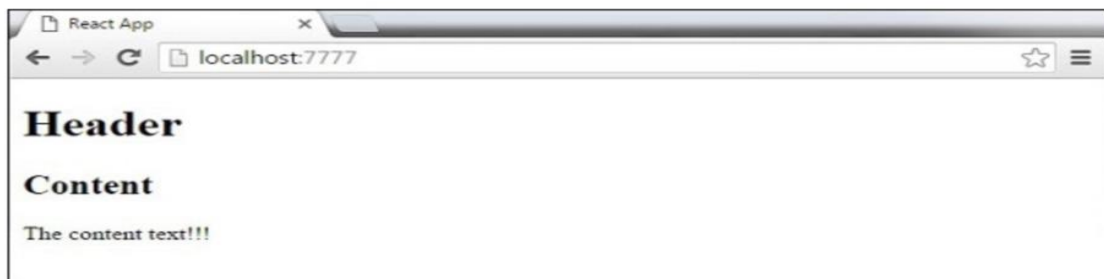
ReactDOM.render(<App />, document.getElementById('app'));

```

Expected Output:



Actual Output:



Experiment-13

AIM: Implement the following in Angular JS

- a) Angular Js data binding.
- b) Angular JS directives and Events.
- c) Using angular Js fetching data from MySQL.

a)Angular JS data binding

Description:

Data binding in AngularJS is the synchronization between the model and the view. AngularJS applications usually have a data model. The data model is a collection of data available for the application.

Source Code:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>
AngularJs Two Binding Example
</title>
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.4.8/angular.min.js"></script>
<script type="text/javascript">
var app = angular.module('angulartwobindapp', []);
app.controller('angulartwobindingCtrl', function ($scope) {
$scope.name = 'Welcome to Tutlane.com';
});
</script>
</head>
<body ng-app="angulartwobindapp">
<div ng-controller="angulartwobindingCtrl">
Enter Name : <input type="text" ng-model="name" style="width:250px" />
<p>
Entered Name:  {{ name }}
</p>
</div>
</body>
</html>
```

Expected Output:

Enter Name :

Entered Name: Welcome to Tutlane.com
© Tutlane.com

Actual Output:

Enter Name :

Entered Name: Welcome to Tutlane.com
© Tutlane.com

b) Angular JS directives and Events.

SOURCE CODE:

```
<!DOCTYPE html>
<html>
<script src= "https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js">
</script>
<style>
.column {
    float: left;
    text-align: left;
    width: 49%;
}
.row {
    content: "";
    display: table;
}
</style>
<body ng-app="myApp"
    ng-controller="myController">
    <h4>Input Box-</h4>
    <div class="row">
        <div class="column">
            Name- <input type="text" ng-model="name">
            <pre> {{ name }} </pre>
        </div>
        <div class="column">
            Checkbox- <input type="checkbox" ng-model="check">
            <pre> {{ check }} </pre>
        </div>
        <div class="column">
            Radiobox- <input type="radio" ng-model="choice">
            <pre> {{ choice }} </pre>
        </div>
    </div>
</body>
</html>
```

```

        <pre> {{ choice }} </pre>
Number- <input type="number" ng-model="num">
        <pre> {{ num }} </pre>
Email- <input type="email" ng-model="mail">
        <pre> {{ mail }} </pre>
Url- <input type="url" ng-model="url">
        <pre> {{ url }} </pre>
    </div>
    <div class="column">
        Date:
        <input type="date" ng-model="date1" (change)="log(date1)">
        <pre> Todays date:{{ date1+1 }} </pre>

Datetime-local- <input type="datetime-local" ng-model="date2">
        <pre> {{ date2+1 }} </pre>
Time- <input type="time" ng-model="time1">
        <pre> {{ time1+1 }} </pre>
Month- <input type="month" ng-model="mon">
        <pre> {{ mon+1 }} </pre>
Week- <input type="week" ng-model="we">
        <pre> {{ we+1 }} </pre>
    </div>
</div>
</body>
<script>
    var app = angular.module('myApp', []);
    app.controller('myController', function($scope) {
        $scope.name = "Hello Geeks!";
        $scope.check = "";
        $scope.rad = "";
        $scope.num = "";
        $scope.mail = "";
        $scope.url = "";
        $scope.date1 = "";
        $scope.date2 = "";
        $scope.time1 = "";
        $scope.mon = "";
        $scope.we = "";
        $scope.choice = "";
        $scope.c = function() {
            $scope.choice = true;
        };
    });
</script>
</html>

```


Actual Outputs:

Input Box-

Name-

Hello Geeks!

Checkbox- ☒

true

Radiobox- ☒

Number-

12454512

Email-

example@123.com

Url-

https://www.geeksforgeeks.org/

Date:

Todays date: Wed May 22 2019 00:00:00 GMT+0530 (India Standard Time)l

Datetime-local-

Wed May 22 2019 00:00:00 GMT+0530 (India Standard Time)l

Time-

Thu Jan 01 1970 00:00:00 GMT+0530 (India Standard Time)l

Month-

Tue Jan 01 2019 00:00:00 GMT+0530 (India Standard Time)l

Week-

Thu Feb 28 2019 00:00:00 GMT+0530 (India Standard Time)l

d) Using angular Js fetching data from MySQL

SOURCE CODE:

index.php

```
<html>
  <head>
    <title>AngularJS Tutorial with PHP </title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css" />
    <script
src="http://ajax.googleapis.com/ajax/libs/angularjs/1.4.8/angular.min.js"></script>
  </head>
  <body style="background:yellow">
    <div class="container" style="width:500px;">
      <h3 align="center">AngularJS Tutorial </h3>
      <div ng-app="myapp" ng-controller="usercontroller" ng-init="displayData()">
        <label>Country Code </label>
        <input type="text" name="" ng-model="id_send" class="form-control" />
        <label>Country</label>
      </div>
    </div>
  </body>
</html>
```

```

        <input type="text" name="" ng-model="name_send" class="form-control" />
        <input type="submit" name="btnInsert" class="btn btn-info" ng-
click="insertData()" value="ADD"/>
<table class="table table-bordered" style="background:#edebee">
    <tr>
    <th>code</th>
    <th>Country</th>
    <tr>
    <tr ng-repeat="x in codes">
        <td>{{ x.id }}</td>
        <td>{{ x.name }}</td>
    <tr>
    </table>
</div>
</div>
</body>
</html>
<script>
var app = angular.module('myapp',[]);
app.controller('usercontroller',function($scope,$http){
$scope.insertData = function(){
$http.post("insert.php",
{'id_ajax':$scope.id_send, 'name_ajax':$scope.name_send}
).success(function(data){
alert(data);
$scope.name_send = null;
$scope.id_send = null;
$scope.displayData();
})
}

$scope.displayData = function(){
    $http.get("select.php").success(function(data){

        $scope.codes = data;
    });
}
})
</script>

```

insert.php

```

<?php

$connect = mysqli_connect("localhost", "root", "", "test");
$data = json_decode(file_get_contents("php://input"));
if(count($data) > 0)

```

```

{
    $id_received = mysqli_real_escape_string($connect, $data->id_ajax);
    $name_received = mysqli_real_escape_string($connect, $data->name_ajax);

    $query = "INSERT INTO country(id, name) VALUES ('$id_received',
$name_received)";
    if(mysqli_query($connect, $query))
    {
        echo "Data Inserted...";
    }
    else
    {
        echo 'Error';
    }
}
?>

```

select.php

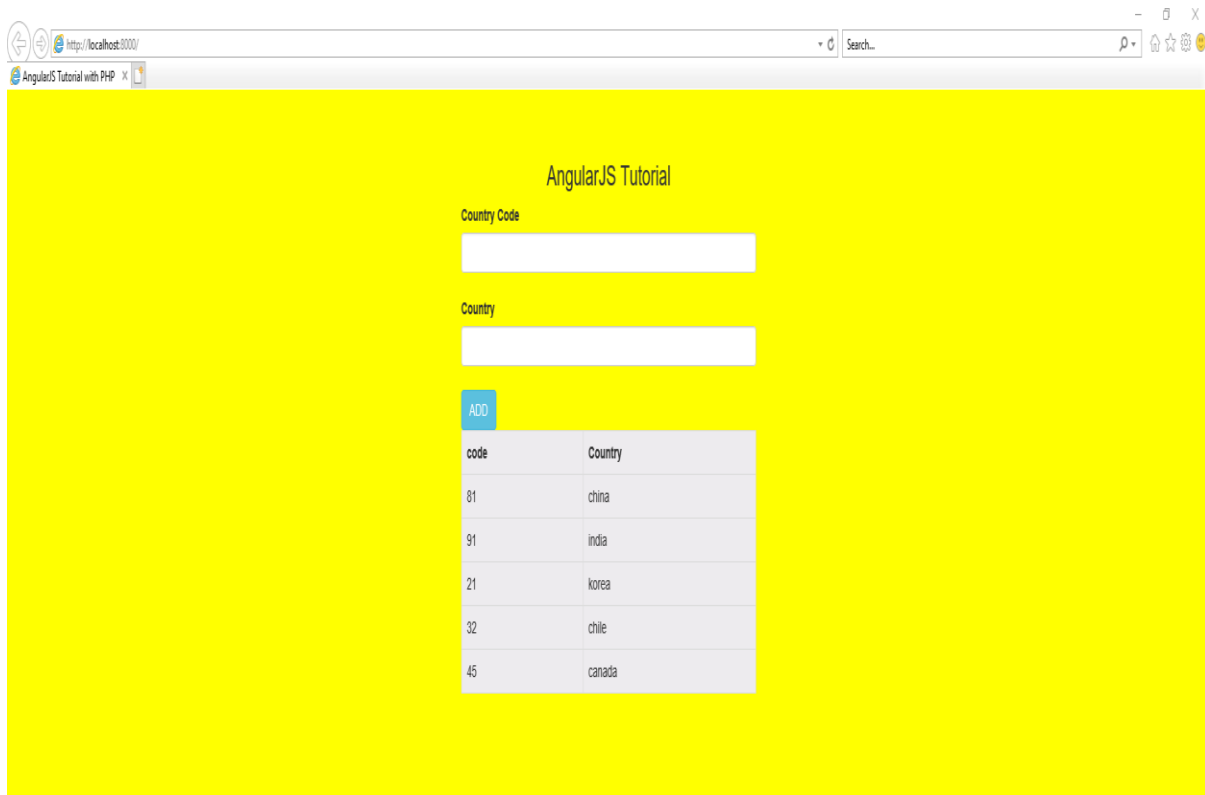
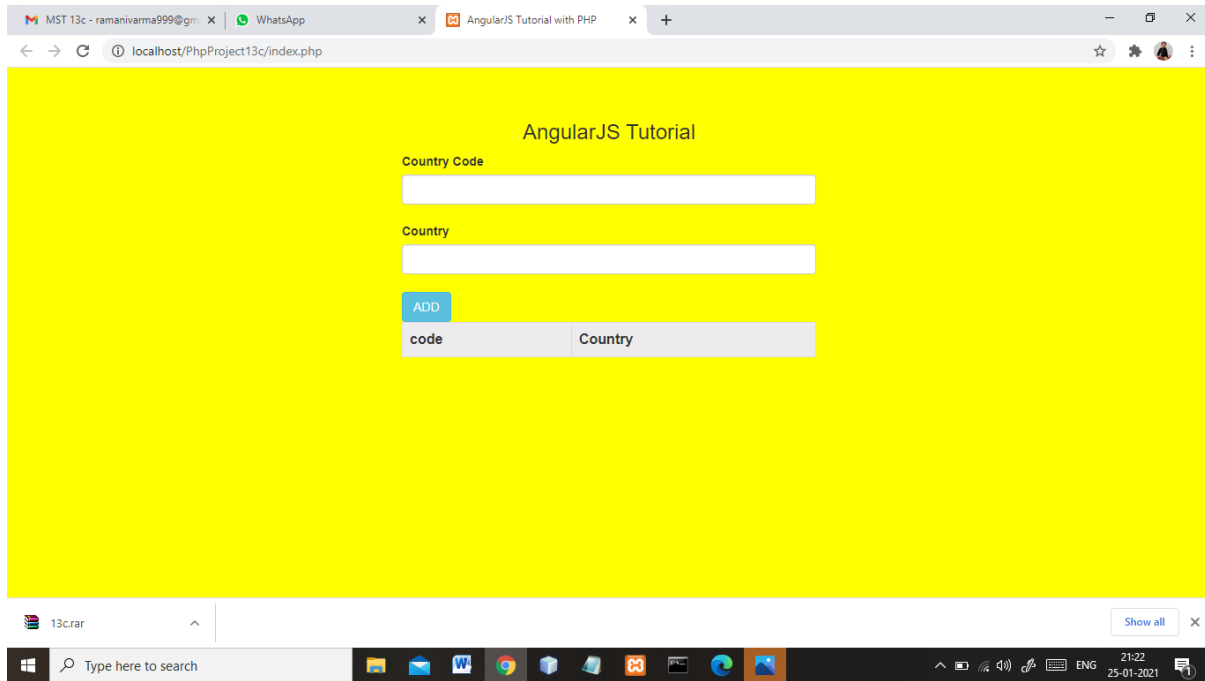
```

<?php
$connect = mysqli_connect("localhost", "root", "", "test");
$output = array();
$query = "SELECT id, name FROM country";

$result = mysqli_query($connect, $query);
if(mysqli_num_rows($result) > 0)
{
    while($row = mysqli_fetch_array($result))
    {
        $output[] = $row;
    }
    echo json_encode($output);
}
?>

```

Actual Outputs:



Experiment-14

AIM: Develop and demonstrate Invoking data using Jscript from Mongo DB.

Description:

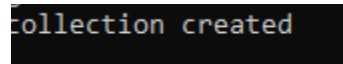
MongoDB is a document-oriented NoSQL database used for high volume data storage. Instead of using tables and rows as in the traditional relational databases, MongoDB makes use of collections and documents. Documents consist of key-value pairs which are the basic unit of data in MongoDB.

Create collection

```
const MongoClient = require("mongodb");
// Server path
const url = 'mongodb://localhost:27017/';
MongoClient.connect(url,
function(err,db){
if(err) throw err;
var dbo = db.db("mydb");

dbo.createCollection("customer",
function(err,res){
if(err) throw err;
console.log("collection created");
db.close();
});
});
```

Actual Output:

A terminal window with a black background and green text displaying the output "collection created".

Insert into collection

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myobj = [
    { name: 'John', address: 'Highway 71'},
    { name: 'Peter', address: 'Lowstreet 4'},
    { name: 'Amy', address: 'Apple st 652'},
```

```

    { name: 'Hannah', address: 'Mountain 21'},
    { name: 'Michael', address: 'Valley 345'},
  ];
  dbo.collection("customers").insertMany(myobj, function(err, res) {
    if (err) throw err;
    console.log("Number of documents inserted: " + res.insertedCount);
    db.close();
  });
});

```

Actual Output:

```
Number of documents inserted: 5
```

Find document based on fields in collection

```

//to find docs based on fields
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection("customers").find({}, { projection: { _id: 0, name: 1, address: 1 }
}).toArray(function(err, result) {
  if (err) throw err;
  console.log(result);
  db.close();
});
});

```

Actual Output:

```

{ name: 'John', address: 'Highway 71' },
{ name: 'Peter', address: 'Lowstreet 4' },
{ name: 'Amy', address: 'Apple st 652' },
{ name: 'Michael', address: 'Valley 345' },
{ name: 'John', address: 'Highway 71' },
{ name: 'Peter', address: 'Lowstreet 4' },
{ name: 'Amy', address: 'Apple st 652' },
{ name: 'Hannah', address: 'Mountain 21' },
{ name: 'Michael', address: 'Valley 345' }

```

Delete documents

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myquery = { address: 'Mountain 21' };
  dbo.collection("customers").deleteOne(myquery, function(err, obj) {
    if (err) throw err;
    console.log("1 document deleted");
    db.close();
  });
});
```

Actual Output:

```
C:\Program Files\nodejs\mongod1>node deleteone.js
(node:5412) DeprecationWarning: current Server Discover
uture version. To use the new Server Discover and Moni
goClient constructor.
1 document deleted
```

Experiment-15

AIM: Create an Online fee payment form using JScript and MangoDB.

Description:

JavaScript (often shortened to JS) is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. JavaScript can function as both a procedural and an object oriented language. MongoDB is a document-oriented NoSQL database used for high volume data storage. Instead of using tables and rows as in the traditional relational databases, MongoDB makes use of collections and documents. Documents consist of key-value pairs which are the basic unit of data in MongoDB.

SOURCE CODE:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en" dir="ltr">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Direct Post Tester</title>
<style type="text/css">
dd { margin-left: 75px; }
#mode_margin { margin-left: 0px; }
</style>
</head>
<body>
<form id="AriaPay" name="AriaPay"
action="https://secure.future.stage.ariasystems.net/api/direct_post.php" method="post">
  <fieldset class="paymethodfieldset">
    <dl>
      <dt>Client Number (normally hidden) </dt>
      <dd>
        <input id="client_no" type="text" name="client_no" value="" size="30"/>
      </dd>
      <dt id="Mode (normally hidden)</dt>
      <dd id="mode_margin">
        <span style="color:#999">direct_post_</span><input id="mode" type="text"
name="mode" value="" size="30"/>
      </dd>
      <dt>Session ID (normally hidden)</dt>
      <dd>
        <input id="inSessionID" name="inSessionID" type="text" value="" size="30"/>
      </dd>
    </dl>
  </fieldset>
</form>
```



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</dd>
<dt>Collection Amount</dt>
<dd>
  <input id="collection_amount" type="text" name="collection_amount"
size="30"/>
</dd>
<div>
  <h2>
    <input type="radio" name="formOfPayment" id="formOfPayment
value=CreditCard />
    Pay by Credit Card</h2>
  </div>
<dt>Card Number</dt>
<dd>
  <input type="text" id="cc_no" name="cc_no" value="4111111111111111"/>
  <span id="err_cc_no" class="jserror"> </span>
</dd>
<dt>Expiry Date</dt>
<dd>
  <table cellpadding="0" cellspacing="0">
    <tr>
      <td><select id="cc_exp_mm" name="cc_exp_mm">
        <option value="">Month</option>
        <option value="1" selected="selected">January</option>
        <option value="2">February</option>
        <option value="3">March</option>
        <option value="4">April</option>
        <option value="5">May</option>
        <option value="6">June</option>
        <option value="7">July</option>
        <option value="8">August</option>
        <option value="9">September</option>
        <option value="10">October</option>
        <option value="11">November</option>
        <option value="12">December</option>
      </select></td>
      <td width="20">&nbsp;</td>
      <td><select id="cc_exp_yyyy" name="cc_exp_yyyy">
<option value="">Month</option>
        <option value="2016" selected="selected">2016</option>
        <option value="2017">2017</option>
        <option value="2018">2018</option>
        <option value="2019">2019</option>
        <option value="2020">2020</option>
      </select></td>
    </tr>
  </table>

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                <option value="2021">2021</option>
                <option value="2022">2022</option>
                <option value="2023">2023</option>
                <option value="2024">2024</option>
                <option value="2025">2025</option>
                <option value="2026">2026</option>
                <option value="2027">2027</option>
<option value="2028">2028</option>
                <option value="2029">2029</option>
<option value="2030">2030</option>
            </select>
        </td>
    </tr>
</table>
</dd>
<dt>Security Code</dt>
<dd>
    <input id="cvv" type="text" size="5" name="cvv" value="111"/>
</dd>
</dl>
</fieldset>
<fieldset >
    <dl id="payMethodACH" >
        <div class="Section_Header">
            <h2>
                <input type="radio" name="formOfPayment" id="formOfPayment" value="ACH" />
                Pay by ACH</h2>
            </div>
            <dt>Routing Number</dt>

            <dd>
                <input type="text" id="bank_routing_num" name="bank_routing_num"
value="999999992"/>
            </dd>
            <dt>Account Number</dt>
            <dd>
                <input type="text" id="bank_acct_num" name="bank_acct_num"
value="111111111" />
            </dd>
        </dl>
    </fieldset>
    <h2>Pay using Net Terms</h2>
    <fieldset class="paymethodfieldset">
        <dl id="payMethodNet0" >
            <dt>

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        <div class="Section_Header">
            <h3>
                <input type=radio name=formOfPayment id=formOfPayment value=Net0 />
                Pay using Net 0</h3>
            </div>
        </dt>
    </dl>
</fieldset>
<fieldset>
    <dl id="payMethodNet10" class="paymethod2" >
        <dt>
            <div>
                <h3>
                    <input type=radio name=formOfPayment id=formOfPayment value=Net10
/>
                    Pay using Net 10</h3>
                </div>
            </dt>
        </dl>
    </fieldset>
<fieldset>
    <dl id="payMethodNet15">
        <dt>
            <div class="Section_Header">
                <h3>
                    <input type=radio name=formOfPayment id=formOfPayment value=Net15
/>
                    Pay using Net 15</h3>
                </div>
            </dt>
        </dl>
    </fieldset>
<fieldset class="paymethodfieldset">
    <dl id="payMethodNet30" class="paymethod2" >
        <dt>
            <div class="Section_Header">
                <h3>
                    <input type=radio name=formOfPayment id=formOfPayment value=Net30
/>
                    Pay using Net 30</h3>
                </div>
            </dt>
        </dl>
    </fieldset>
</fieldset>

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<dl id="payMethodNet15">
  <dt>
    <div>
      <h3>
        <input type=radio name=formOfPayment id=formOfPayment value=Net45
/>
        Pay using Net 45</h3>
      </div>
    </dt>
  </dl>
</fieldset>
<fieldset>
  <dl id="payMethodNet60">
    <dt>
      <div class="Section_Header">
        <h3>
          <input type=radio name=formOfPayment id=formOfPayment value=Net60 />
          Pay using Net 60</h3>
        </div>
      </dt>
    </dl>
  </fieldset>
  <fieldset>
    <dl>
      <dd class="button">
        <input type="submit" name="submitPayment" id="submitPayment"
value="Submit" />
      </dd>
    </dl>
  </fieldset>
</form>
</div>
<footer>
<script src="https://secure.ariasystems.net/api/ariaCHD.js"></script>
<script language="javascript">
  aria.environmentId ="future.stage";
</script>
</footer>
</body>
</html>
</html>

```

Actual Outputs:

Client Number (normally hidden)	ASRL8021349
Mode (normally hidden)	
direct_post ONLINE	
Session ID (normally hidden)	As88032
Collection Amount	2000
<input checked="" type="radio"/> Pay by Credit Card	
Card Number	4111111111111111
Expiry Date	January 2016
Security Code	111
<input type="radio"/> Pay by ACH	
Routing Number	999999992
Account Number	1111111111

Pay using Net Terms

<input type="radio"/> Pay using Net 0	Activate Windows Go to Settings to activate Windows.
<input type="radio"/> Pay using Net 10	