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Sri Indu
College of Engineering & Technology
UGC Autonomous Institution
Recognized under 2(f) & 12(B) of UGC Act 1956,
NAAC, Approved by AICTE &
Permanently Affiliated to JNTUH

Estd.2001

WEB TECHNOLOGY LAB
(R22CSE3257)

LAB MANUAL

III Year II Semester

DEPARTMENT OF INFORMATION TECHNOLOGY

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY
B. TECH –INFORMATION TECHNOLOGY

INSTITUTION VISION

To be a premier Institution in Engineering & Technology and Management with competency, values and social consciousness.

INSTITUTION MISSION

IM1 Provide high quality academic programs, training activities and research facilities.

IM2 Promote Continuous Industry-Institute Interaction for Employability, Entrepreneurship, Leadership and Research aptitude among stakeholders.

IM3 Contribute to the Economical and technological development of the region, state and nation.

DEPARTMENT VISION

To be a recognized knowledge centre in the field of Information Technology with self - motivated, employable engineers to society.

DEPARTMENT MISSION

The Department has following Missions:

DM1 To offer high quality student centric education in Information Technology.

DM2 To provide a conducive environment towards innovation and skills.

DM3 To involve in activities that provide social and professional solutions.

DM4 To impart training on emerging technologies namely cloud computing and IOT with involvement of stake holders.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: **Higher Studies:** Graduates with an ability to apply knowledge of Basic sciences and programming skills in their career and higher education.

PEO2: **Lifelong Learning:** Graduates with an ability to adopt new technologies for ever changing IT industry needs through Self-Study, Critical thinking and Problem solving skills.

PEO3: **Professional skills:** Graduates will be ready to work in projects related to complex problems involving multi-disciplinary projects with effective analytical skills.

PEO4: **Engineering Citizenship:** Graduates with an ability to communicate well and exhibitsocial, technical and ethical responsibility in process or product.

PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC OUTCOMES (PSOs)

PO	Description
PO 1	**Engineering Knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.
PO 2	**Problem Analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
PO 3	**Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)
PO 4	**Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
PO 5	**Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)
PO 6	**The Engineer and The World:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
PO 7	**Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
PO 8	**Individual and Collaborative Team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
PO 10	**Project Management and Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
PO 11	**Life-Long Learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)
Program Specific Outcomes	
PSO 1	**Software Development:** To apply the knowledge of Software Engineering, Data Communication, Web Technology and Operating Systems for building IOT and Cloud Computing applications.
PSO 2	**Industrial Skills Ability:** Design, develop and test software systems for world-wide network of computers toprovide solutions to real world problems.
PSO 3	**Project implementation:** Analyze and recommend the appropriate IT Infrastructure required for the implementationof a project.

GENERAL LABORATORY INSTRUCTIONS

1. Students are advised to come to the laboratory at least 5 minutes before (to the starting time),those who come after 5 minutes will not be allowed into the lab.
2. Plan your task properly much before to the commencement, come prepared to the lab with thesynopsis / program / experiment details.
3. Student should enter into the laboratory with:
    a) Laboratory observation notes with all the details (Problem statement, Aim, Algorithm,Procedure, Program, Expected Output, etc.,) filled in for the lab session.
    b) Laboratory Record updated up to the last session experiments and other utensils (if any)needed in the lab.
    c) Proper Dress code and Identity card.
4. Sign in the laboratory login register, write the TIME-IN, and occupy the computer system allotted to you by the faculty.
5. Execute your task in the laboratory, and record the results / output in the lab observation notebook, and get certified by the concerned faculty.
6. All the students should be polite and cooperative with the laboratory staff, must maintain thediscipline and decency in the laboratory.
7. Computer labs are established with sophisticated and high end branded systems, which should be utilized properly.
8. Students / Faculty must keep their mobile phones in SWITCHED OFF mode during the lab sessions. Misuse of the equipment, misbehaviors with the staff and systems etc., will attract severe punishment.
9. Students must take the permission of the faculty in case of any urgency to go out ; if anybody found loitering outside the lab / class without permission during working hours will be treated seriously and punished appropriately.
10. Students should LOG OFF/ SHUT DOWN the computer system before he/she leaves the labafter completing the task (experiment) in all aspects. He/she must ensure the system / seat is kept properly.

Head of the Department **Principal**

Course Name: WEB TECHNOLOGIES LAB **Course Code R22CSE3257**

Semester No:	II		
Course Title	**WEB TECHNOLOGIES LAB**	**Course Code:**	R22CSE3267
Course Outcome No.	**Course Outcome Statement**		
C32L3.1	Use LAMP Stack for web applications Use Tomcat Server for Servlets and JSPs.		
C32L3.2	Write simple applications with Technologies like HTML, Javascript, AJAX, PHP, Servlets and JSPs Connect to Database and get results Parse XML files using Java (DOM and SAX parsers)		

Course Outcomes (COS)	**Program Outcomes (POs)**											**Program Specific Outcomes (PSOs)**		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P10	P11	PSO1	PSO2	PSO3
C32L3.1	1	1	2	-	3	-	-	-	-	-	-	-	-	-
C32L3.2	1	-	1	-	3	-	-	-	-	-	-	1	1	-
C32L3	1	1	1.5	-	3	-	-	-	-	-	-	1	1	-

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institution under UGC, New Delhi)

B.Tech. - III Year – II Semester

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Professional Elective – III LAB
(R22CSE3257) WEB TECHNOLOGIES LAB

WEB TECHNOLOGIES LAB

1. Install the following on the local machine Apache Web Server (if not installed)
- Tomcat Application Server locally
- Install MySQL (if not installed)
- Install PHP and configure it to work with Apache web server and
- MySQL (if not already configured)

2. Write an HTML page including any required Javascript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. If the number is out of range, it should show "out of range" and if it is not a number, it should show "not a number" message in the result box.

3. Write an HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button, it should show the number of characters, words and lines in the text entered using an alert message. Words are separated with white space and lines are separated with new line character.

4. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

5. 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 the XML document using
   (a) DOM Parser and
   (b) SAX parser

6. Implement the following web applications using
   (a) PHP,
   (b) Servlets and
   (c) JSP:

   i. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.
   ii. Modify the above program to use an xml file instead of database.
   iii. Modify the above program to use AJAX to show the result on the same page below the submit button.
   iv. A simple calculator web application that takes two numbers and an operator (+, -, /, * and %) from an HTML page and returns the result page with the operation performed on the operands.
   v. Modify the above program such that it stores each query in a database and checks the database first for the result. If the query is already available in the DB, it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.
   vi. A web application takes a name as input and on submit it shows a hello page where is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage (hint: Use session to store name and time).
   vii. A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with "Hello , you are not authorized to visit this site" message, where should be replaced

with the entered name. Otherwise it should send "Welcome to this site" message.

viii. A web application for implementation:

ix. The user is first served a login page which takes user's name and password. After submitting the details the server checks these values against the data from a database and takes the following decisions.

x. If name and password matches, serves a welcome page with user's full name. If name matches and password doesn't match, then serves "password mismatch" page If name is not found in the database, serves a registration page, where user's full name is asked and on submitting the full name, it stores, the login name, password and full name in the database (hint: use session for storing the submitted login name and password)

xi. A web application that lists all cookies stored in the browser on clicking "List Cookies" button. Add cookies if necessary

Outcomes:

xUse LAMP Stack for web applications Use Tomcat Server for Servlets and JSPs
Write simple applications with Technologies like HTML, Javascript, AJAX, PHP, Servlets and JSPs Connect to Database and get results Parse XML files using Java (DOM and SAX parsers)

WEB TECHNOLOGIES LAB MANUAL - PROGRAMS

PROBLEM STATEMENT: Install the following on local machine

Apache Web

ServerInstall

MySQL

Install PHP and configure it to work with apache web server and

MySQLTomcat Application Server Locally

AIM: Installing and configuring Apache web server, MySQL with PHP in Linux Environment

PROCEDURE:

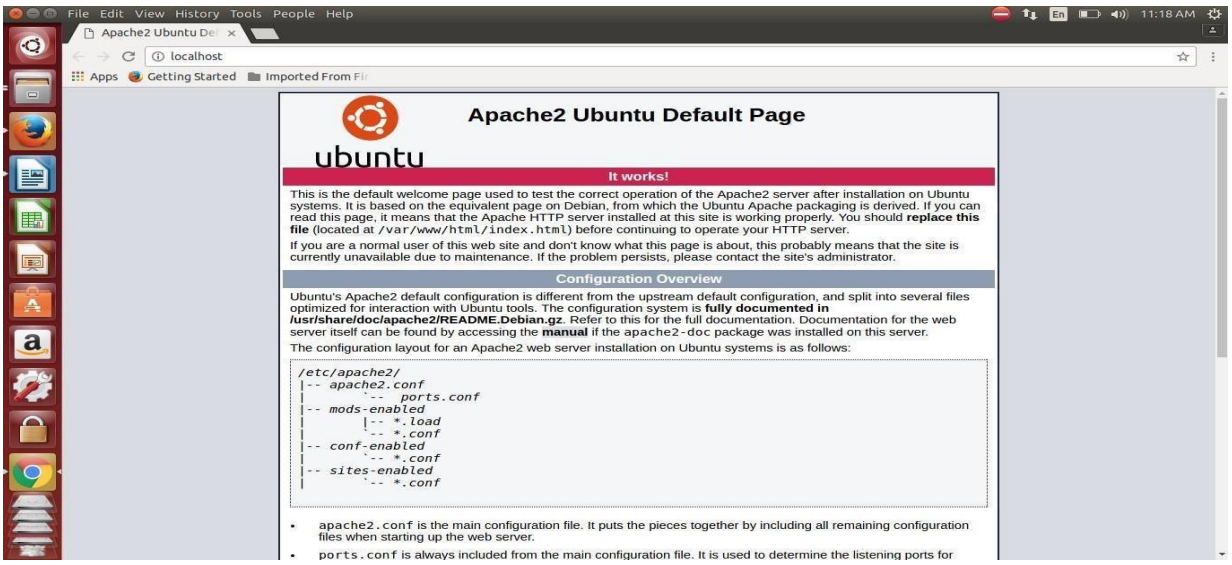
Step1: Install Apache Web server

$ sudo apt-get update

$ sudo apt-get install apache2

To verify the installation use the following statementhttp://localhost or http://server-public-ip-address

OUTPUT:



Step2: Installation of mysql server

$ sudo apt-get install mysql-server php5-mysql

During the installation, your server will ask you to select and confirm a password for the MySQL "root" user. This is an administrative account in MySQL that has increased privileges. Think of it as being similar to the root account for the server itself (the one you are configuring now is a MySQL-specific account however).

When the installation is complete, we need to run some additional commands to get our MySQL environment set up securely.
First, we need to tell MySQL to create its database directory structure where it will storeits information. You can do this by typing: **$ sudo mysql_install_db**
Run a security script that will remove some dangerous defaults and lock down access toour database system a little bit.

$ sudo mysql_secure_installation

Enter the password you set for the MySQL root account. Next, it will ask you if you want to change that password. If you are happy with your current password, type "n" for "no" atthe prompt.

For the rest of the questions, you should simply hit the "ENTER" key through each promptto accept the default values.

Step3: Installation of PHP

$ sudo apt-get install php5 libapache2-mod-php5 php5- mcryptTesting

the PHP:

if a user requests a directory from the server, Apache will first look for a file called index.html. We want to tell our web server to prefer PHP files, so we'll make Apache look for an index.php file first. To do this, type this command to open the dir.conf filein a text editor with root privileges:

$ sudo nano /etc/apache2/mods-enabled/dir.conf

<IfModule mod_dir.c>

DirectoryIndex index.html index.cgi index.pl index.php index.xhtml index.htm

</IfModule>

The above code need to be replace by the following code:

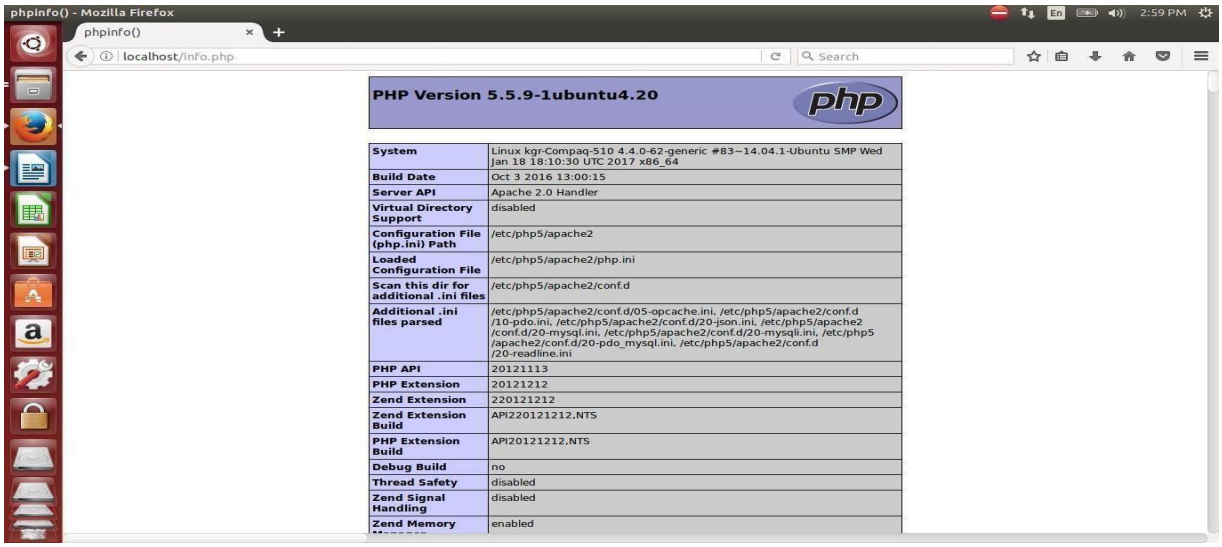
<IfModule mod_dir.c>

DirectoryIndex index.php index.html index.cgi index.pl index.xhtml index.htm

</IfModule>

Save and close the file by pressing "CTRL-X". Restart the apache server

$ sudo service apache2 restart



Test PHP Processing on your Web Server :(Create a file info.php)

In order for Apache to find the file and serve it correctly, it must be saved to a very specific directory, which is called the "web root". In Ubuntu 14.04, this directory is located at /var/www/html/. We can create the file at that location by typing:

$ sudo nano /var/www/html/info.php

This will open a blank file. put the following text, which is valid PHP code, inside the file:

<?php phpinfo(); ?> save and close the file.

The address you want to visit will be: http://your_server_IP_address/info.php EX: http://localhost/info.php

Step 4: Installation & Configuration of Tomcat8 Application Server in Ubuntu 14.04

i. Download Apache Tomcat from the follwoing link:

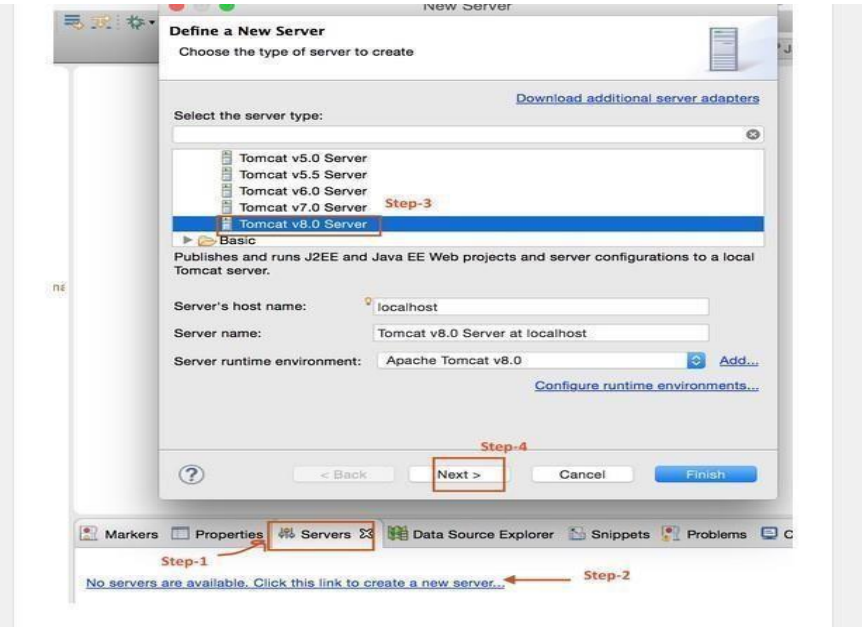
http://tomcat.apache.org/download-80.cgi

Select the version 8.0.42 and click on Zip under Core.

ii. Extact the downloaed apache tomcat8 into documents folder

iii. Open Eclipse Environment

- Click on Servers Tab
- Click on No servers are available. Click this link to create a new server...
- Click Tomcat v8.0 Server and Next select apache installation directory and clickon Finish.



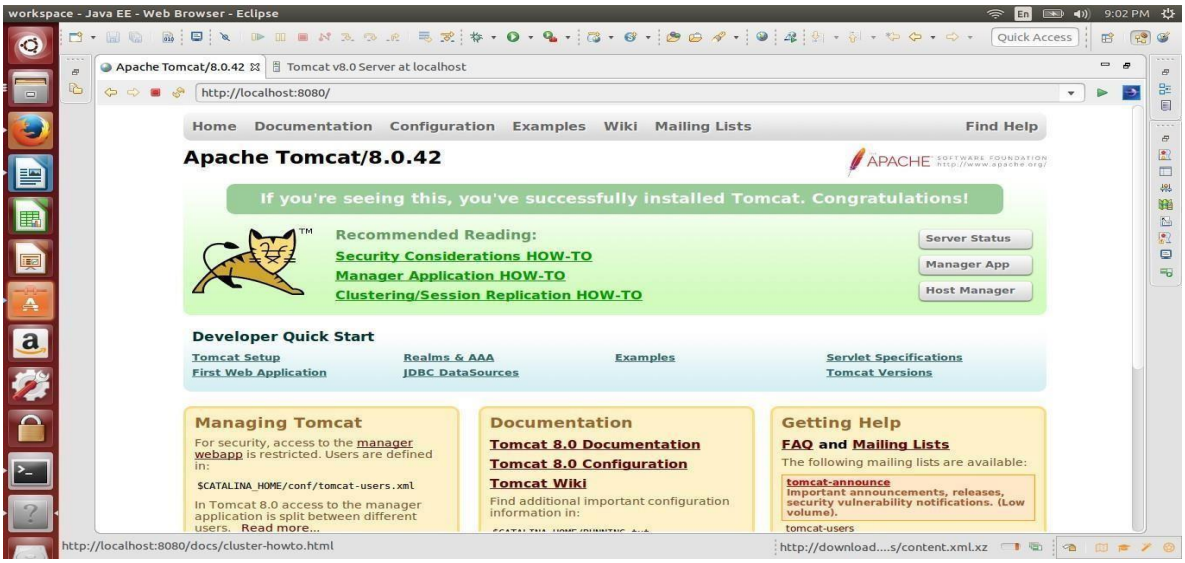
You should see Tomcat v8.0 Server at localhost [Stopped, Republish] under Servers tab. Double click on it verify HTTP ports information. By default HTTP port is 8080.

Right click on the server in "Servers" view, select "Properties".

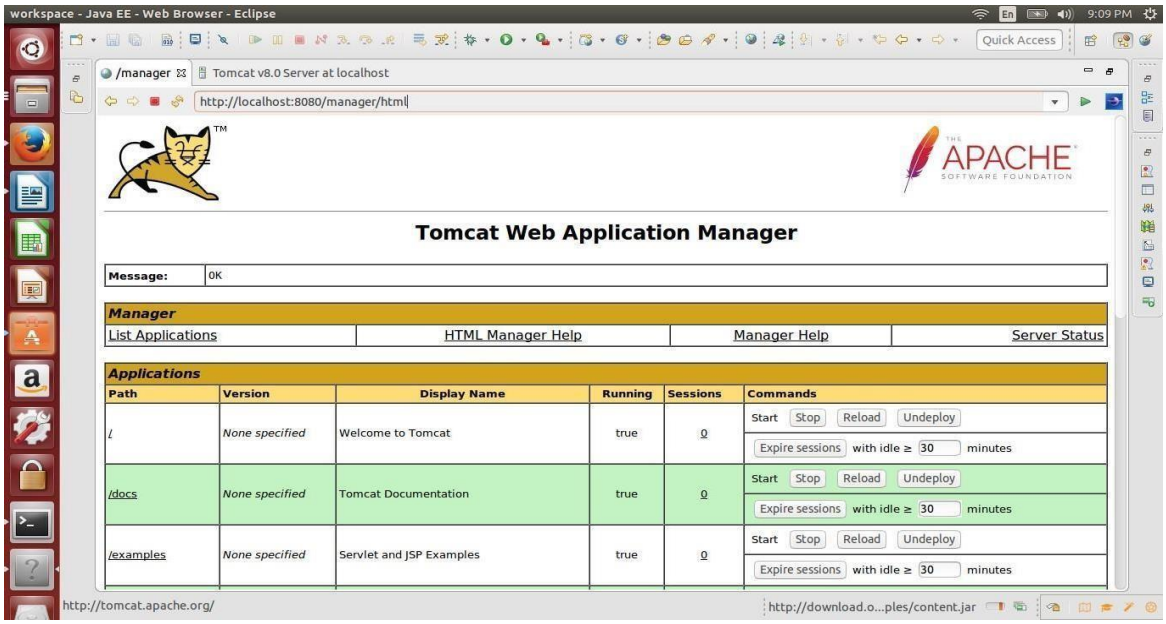
- In the "General" panel, click on the "Switch Location" button.
- The "Location: [workspace metadata]" should replace by something else.
- Open the Overview screen for the server by double clicking it.

- In the Server locations tab , select "Use Tomcat location".
- Save the configurations and restart the Server.

Type the link http://localhost:8080 in browser o access the tomcat home page and manager.



Click on webapps manager in Managing Tomcat option and enter username: admin andpaswword: password then it will show the list applications deployed on to webapps in tomcat.



EXPERIMENT 1:

Aim:

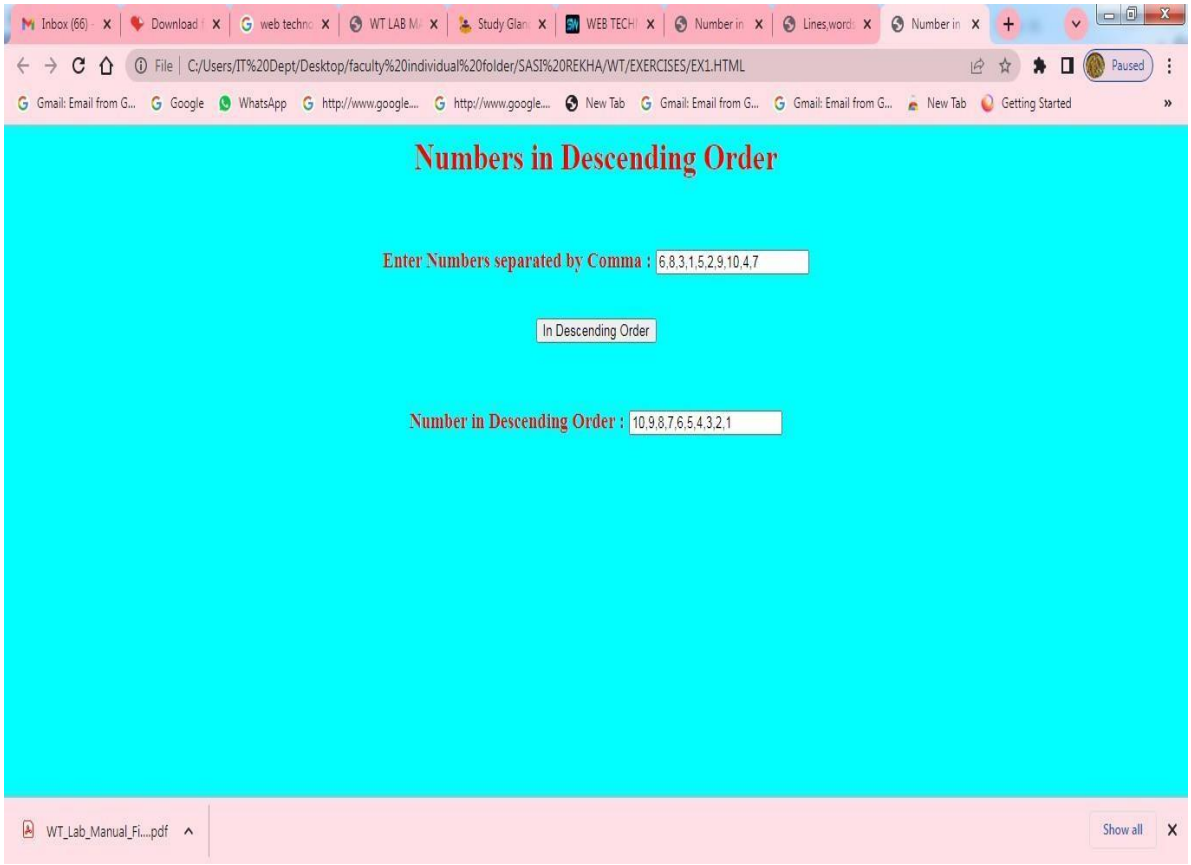
Write an HTML page including JavaScript that takes a given set of integer numbers and shows them after sorting in descending order.

Source Code:

```
<html>
<head>
<title>Number in Descending Order</title>
<script language="javascript">
function ndesc()
{
var num_array=new Array();
var num=document.forms["frm1"].num.value;
document.forms["frm1"].desc.value="";
var nums = num.split(','); var
len=num.split(',').length;
for(var i=0;i<len;i++)
{
num_array.push(nums[i]);
}
function sortN(a,b)
{
return b - a;
}
document.forms["frm1"].desc.value=  num_array.sort(sortN);
}
</script>
</head>
<body bgcolor=”cyan” text=”red”>
<form name="frm1">
<center>
<h1> Numbers in Descending Order</h1>
</center>
```

```
<br/>
<center><h3>Enter  Numbers separated by Comma : <input type="text"
name="num"</input></h3><br/></center>
<br/>
<center>
<input type="button"  name="inwords" value="In Descending Order" onclick="ndesc()"></input>
</center>
<br/><br/>
<center><h3>Number in Descending Order : <input type="text" name="desc"</input></h3></center>
<br/>
</form>
</body>
</html>
```

OUTPUT:



EXPERIMENT - 2

Write html page to take a number from text field in the range 0 to 999 and display in other text field inwords. If number is out of range display alert with “out of range” & display “Not a number” if it is not a number.

Aim: Read the number from a text field and display in words format in another text field.

Source Code:

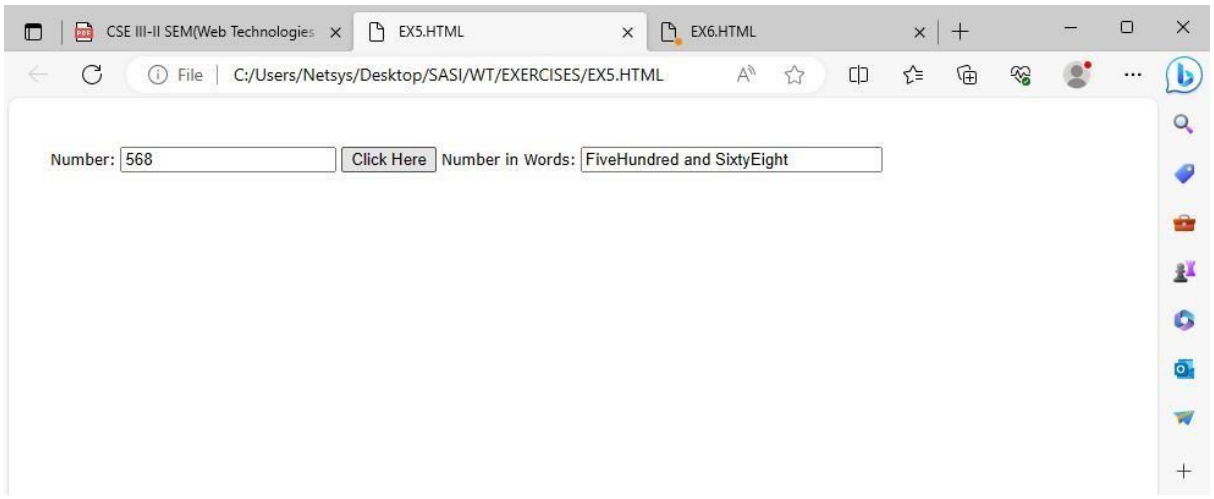
```
<html>
<script type="text/javascript">
var nume=document.getElementById('num').value;
function isNumeric()
{
var elem=document.niw.num.value;
if(elem!="")
{
var numericExpression = /^[0-9]+$/;
if(elem<0||elem>999)
{
alert("Please Enter Number from 0 to 999");
document.niw.num.value="";
return false;
}
else if(elem.match(numericExpression))
{
return true;
}
else
{
alert("Please Enter Only Number ");
document.niw.num.value="";
```

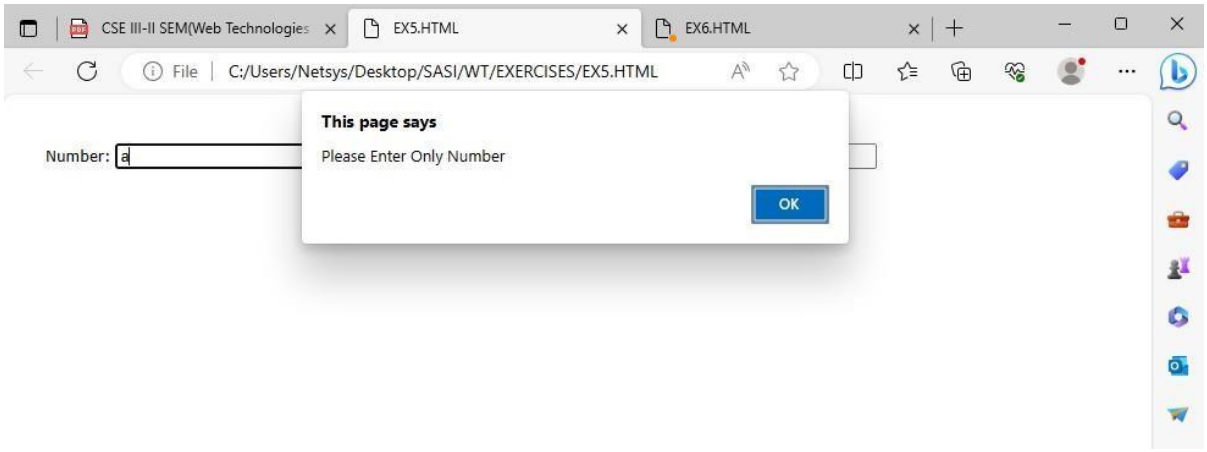
```
return false;       } } }
function numinwrd()
{
var numbr=document.getElementById('num').value; var
str=new String(numbr);
var splt=str.split("");
var rev=splt.reverse();
var once=['Zero', ' One', 'Two', 'Three', 'Four','Five', 'Six','Seven', 'Eight', 'Nine'];
var twos=['Ten', ' Eleven', ' Twelve', ' Thirteen', ' Fourteen', ' Fifteen', ' Sixteen', ' Seventeen', '
 Eighteen',' Nineteen'];
var tens=[ '', 'Ten', ' Twenty', ' Thirty', ' Forty', ' Fifty', ' Sixty', ' Seventy', ' Eighty', ' Ninety' ];
numlen=rev.length;
var word=new Array(); var
j=0; for(i=0;i<numlen;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)
```

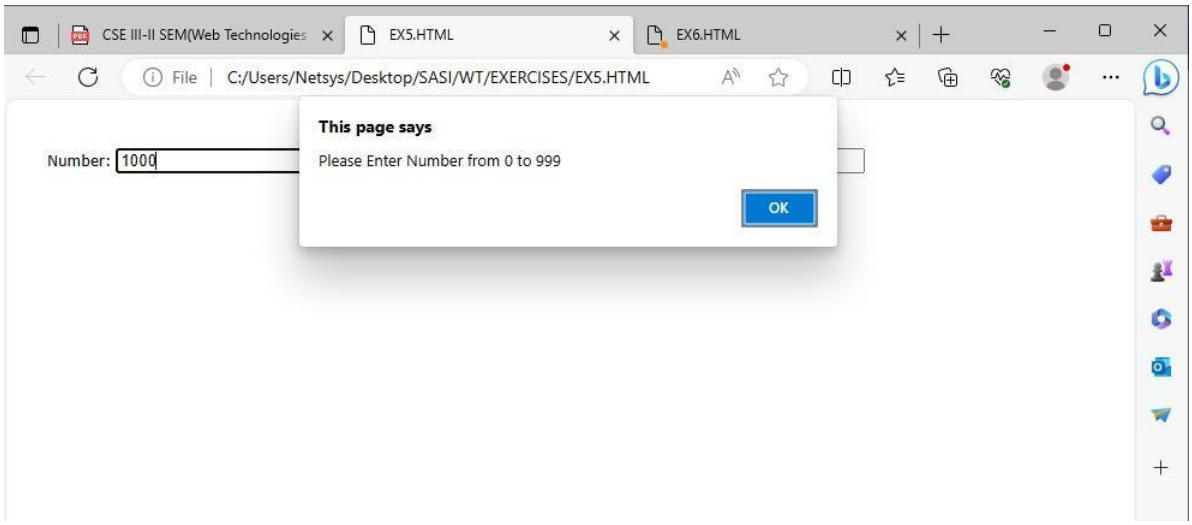
```
{       word[j]='';       }
else if((rev[i-1]==0)   ||   (rev[i-2]==0)   )
{
word[j]=once[rev[i]]+"Hundred  ";
}
else
{
word[j]=once[rev[i]]+"Hundred  and";
}
break;
case 3:
if(rev[i]==0 || rev[i+1]==1) {word[j]='';
}
else
{
word[j]=once[rev[i]];
}
default:
break;
}
j++;
}

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
finalw='';
for(i=0;i<numlen;i++)
{
finalw= finalw+word[i];
}
document.niw.word.value=finalw;
}
</script>
<form name="niw">
<table align=center width=100% style="font-size: 12px; display: block;">
<tr><td>
<table width=100% style="font-family: Monaco, Verdana, Sans-serif; font-size: 12px; display: block; margin-top: 14px;padding: 12px 20px 12px 20px;">
<tr> <td>Number:</td>
<td><input type="text" name="num" id="num" maxlength=9 onKeyup="isNumeric()"></td>
<td><input type="button" name="sr1" value="Click Here" onClick="numinwrd()"></td>
<td>Number in Words:</td>
<td><input type="text" name="word" id="word" size=30></td></tr>
</table>
</td></tr>
</table>
</form>
</html>
```

OUTPUT:


CSE III-II SEM(Web Technologies
EX5.HTML
EX6.HTML
File | C:/Users/Netsys/Desktop/SASI/WT/EXERCISES/EX5.HTML
Number: 568
Click Here
Number in Words: FiveHundred and SixtyEight


CSE III-II SEM(Web Technologies
EX5.HTML
EX6.HTML
File | C:/Users/Netsys/Desktop/SASI/WT/EXERCISES/EX5.HTML
This page says
Please Enter Only Number
OK
Number: a


CSE III-II SEM(Web Technologies
EX5.HTML
EX6.HTML
File | C:/Users/Netsys/Desktop/SASI/WT/EXERCISES/EX5.HTML
This page says
Please Enter Number from 0 to 999
OK
Number: 1000

VIVA VOICE QUESTIONS:

EXPERIMENT 2:

1. **What is JavaScript?**
   Ans: JavaScript is a scripting language most often used for client-side web development.

2. **What is the difference between JavaScript and Jscript?**
   Ans: Both JavaScript and Jscript are almost similar. JavaScript was developed byNetscape. Microsoft reverse engineered JavaScript and called it JScript.

3. **What is a prompt box?**
   Ans: A prompt box is a box which allows the user to enter input by providing a text box.Label and box will be provided to enter the text or number.

4. **What is "this" keyword in JavaScript?**
   Ans: "This" keyword is used to point at the current object in the code. For instance: If thecode is presently at an object created by the help of the "new" keyword, then "this" keyword will point to the object being created.

5. **Explain how can you submit a form using JavaScript?**
   Ans: To submit a form using JavaScript use document.form[0].submit(); document.form[0].submit();

EXPERIMENT - 3:

Aim:

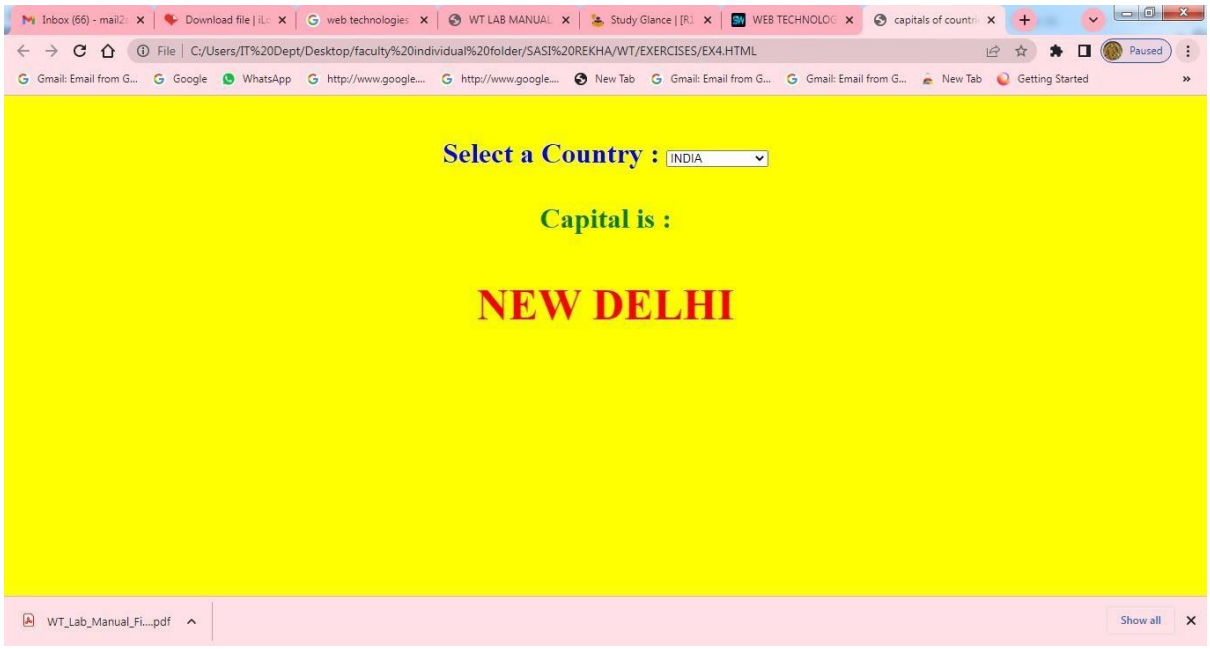
Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

Source Code:

```
<html>
<head>
<title>capitals of countries</title>
<style> p{
color:red;
font-weight:bold;
font-size:50;
}
</style>
<script language="javascript">
function capital()
{
var cunt=document.forms["frm1"].country.value; var
capital=" Please select any country ";
if( cunt=="india")
{
capital="NEW DELHI";
}
if( cunt=="china")
{
capital="BEIJING";
}
if( cunt=="pakistan")
{
capital="ISLAMABAD";
}
```

```
if( cunt=="bangladesh")
{
capital="DHAKA";
}
if( cunt=="japan")
{
capital="TOKYO";
}
if( cunt=="select")
{
capital="Please select any country";
}
document.getElementById("capt").innerHTML=capital;
}
</script>
</head>
<body bgcolor="yellow" text="blue">
<form name="frm1">
<br/>
<center>
<h1>Select a Country : <select name="country" onchange="capital()">
<option  value="select">--SELECT--</option>
<option value="india">INDIA</option>
<option value="china">CHINA</option>
<option value="pakistan">PAKISTAN</option>
<option value="bangladesh">BANGLADESH</option>
<option value="japan">JAPAN</option>
</select>
<br/>
<br/>
<font color="green" size="6">Capital is :</font> <p id="capt"></p>
</center>
</form>
</body> </html>
```

OUTPUT:



VIVA VOICE QUESTIONS:

EXPERIMENT 3:

1. **What is image map?**

   Ans: Image map lets you link to many different web pages using a single image. You candefine shapes in images that you want to make part of an image mapping.

2. **How do you create links to sections within the same page?**

   Ans: Links can be created using the <a> tag, with referencing through the use of the number (#) symbol. For example, you can have one line as BACKTO TOP, which would result in the words “BACK TO TOP” appearing on the webpage and links to a bookmark named topmost. You then create a separate tag command like <a name=”topmost”> somewhere on the top of the same webpage so thatthe user will be linked to that spot when he clicked on “BACK TO TOP”.

3. **What are style sheets?**

   Ans: Style sheets enable you to build consistent, transportable, and well-defined style templates. These templates can be linked to several different web pages, making it easy to maintain and change the look and feel of all the web pages within a site.

4. **How do you create a link that will connect to another web page when clicked?**

   Ans: To create hyperlinks, or links that connect to another web page, use the href tag.The general format for this is: text
   Replace “site” with the actual page url that is supposed to be linked to when the text isclicked.

5. **What is the relationship between the border and rule attributes?**

   Ans: Default cell borders, with a thickness of 1 pixel, are automatically added between cells if the border attribute is set to a nonzero value. Likewise, If the border attribute is not included, a default 1-pixel border appears if the rules attribute is added to the <table>tag.

EXPERIMENT 4:

Write html page which can take multi-line text and display the no. Of characters, words and lines in the text entered using alert message.

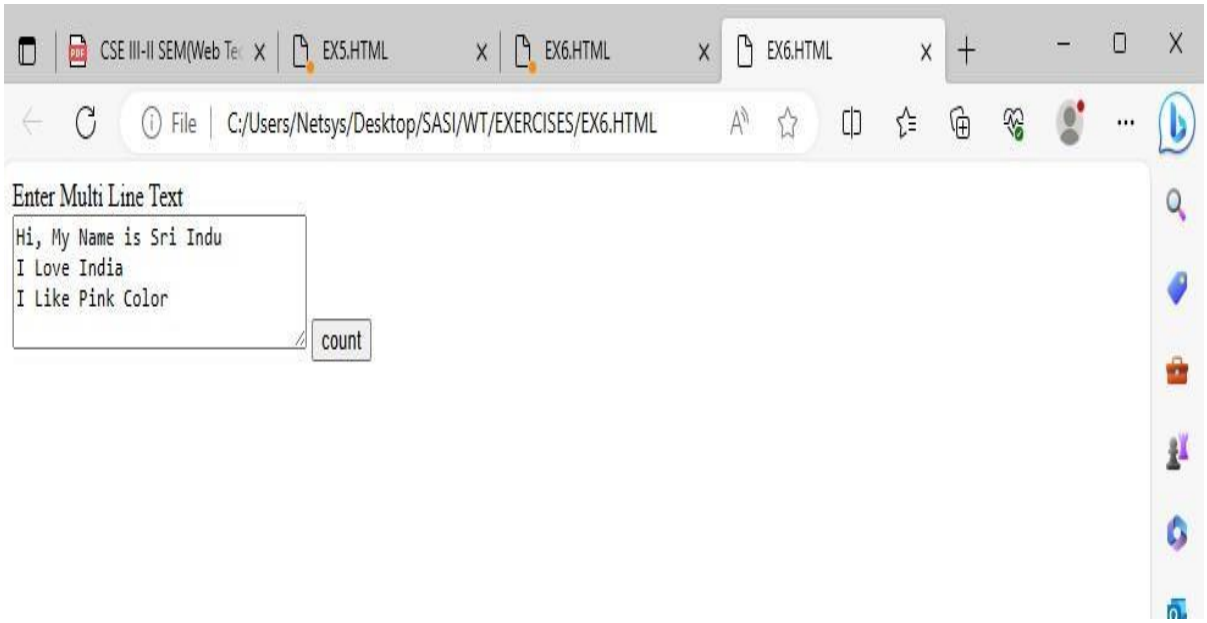
Aim:

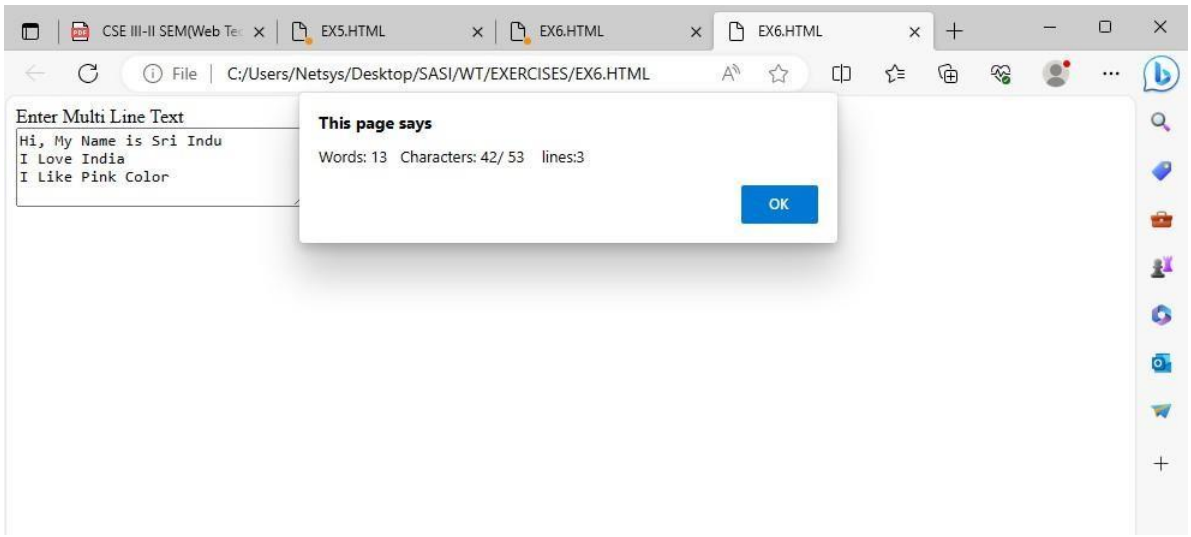
Html page which can take multi-line text and display the no. Of characters, words and lines in the text entered using alert message.

Source Code:

```
<html>
<script type="text/javascript">
function countWCL()
{
var textarea=document.getElementById("tarea"); var
text = textarea.value;
value = "Words: " + (text.split(/\b\S+\b/).length - 1) + "  Characters: " + text.replace(/\s/g, "").length + "/ " +
text.replace(/\n/g, "").length + "                lines:" + text.split("\n").length;
alert(value);
}
</script>
<form name="cwl">
Enter Multi Line Text <br>
<textarea name="string" id="tarea" rows=4 cols=30></textarea>
<input type="button" name="sub" value="count" onClick="countWCL()">
</form>
</html>
```

OUTPUT:


CSE III-II SEM(Web Te
EX5.HTML
EX6.HTML
EX6.HTML
File
C:/Users/Netsys/Desktop/SASI/WT/EXERCISES/EX6.HTML
Enter Multi Line Text
Hi, My Name is Sri Indu
I Love India
I Like Pink Color
count


CSE III-II SEM(Web Te
EX5.HTML
EX6.HTML
EX6.HTML
File
C:/Users/Netsys/Desktop/SASI/WT/EXERCISES/EX6.HTML
Enter Multi Line Text
Hi, My Name is Sri Indu
I Love India
I Like Pink Color
This page says
Words: 13 Characters: 42/ 53 lines:3
OK

VIVA VOICE QUESTIONS:

EXPERIMENT 4:

1. **What do mean by NULL in Javascript?**
   Ans: The NULL value is used to represent no value or no object. It implies no object ornull string, no valid boolean value, no number and no array object.

2. **What are JavaScript Cookies?**
   Ans: Cookies are the small test files stored in a computer and it gets created when the user visits the websites to store information that they need. Example could be User Namedetails and shopping cart information from the previous visits.

3. **What are the different types of errors in JavaScript?**
   Ans: There are three types of errors:
   Load time errors: Errors which come up when loading a web page like improper syntaxerrors are known as Load time errors and it generates the errors dynamically.
   Run time errors: Errors that come due to misuse of the command inside the HTMLlanguage.
   Logical Errors: These are the errors that occur due to the bad logic performed on afunction which is having different operation.

4. **What is the use of Push method in JavaScript?**
   Ans: The push method is used to add or append one or more elements to the end of anArray. Using this method, we can append multiple elements by passing multiple arguments

5. **What are all the types of Pop up boxes available in JavaScript?**
   Ans: Alert, Confirm andPrompt

EXPERIMENT – 5 (A)

Create an xml document that contains 10 users information. Write a java program, which takes user idand returns the user details by taking from xml document using DOM Parser.

AIM: generating an xml file containing 10 users information. display the user details by taking user information from xml file using java program.

PROGRAM: 6(A) EMPLOYEE PARSING (USING DOM PARSER)

File Name : users.xml

<?xml version="*1.0*" encoding="*UTF-8*"?>

```
<employees>
   <employee id="501">

      <firstName>Sunil</firstName>
      <lastName>Yadav</lastName>
      <location>Hyd</location>
   </employee>
   <employee id="502">

      <firstName>Trilok</firstName>
      <lastName>Reddy</lastName>
      <location>Chevella</location>
   </employee>
   <employee id="503">

      <firstName>Mallikarjun</firstName>
      <lastName>Tiger</lastName>
      <location>Forest</location>
   </employee>
   <employee id="504">

      <firstName>Neelima</firstName>
      <lastName>Lakshmi</lastName>
      <location>MP</location>
   </employee>
   <employee id="505">

      <firstName>Abhi</firstName>
      <lastName>Shambu</lastName>
      <location>LD</location>
```

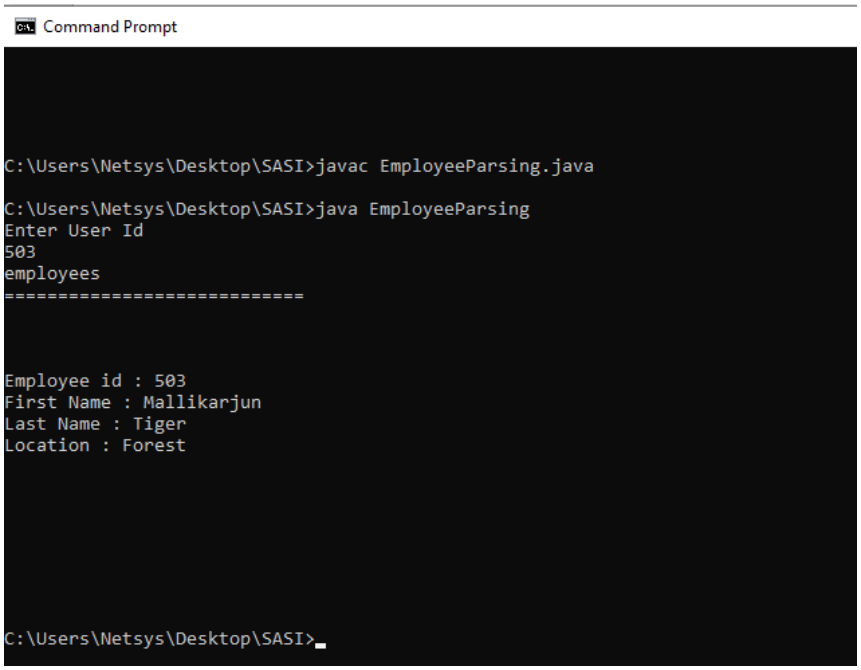
```
    </employee>
    <employee id="506">

        <firstName>Nikitha</firstName>
        <lastName>Reddy</lastName>
        <location>UP</location>
    </employee>
    <employee id="507">

        <firstName>Ashwini</firstName>
        <lastName>Reddy</lastName>
        <location>ADB</location>
    </employee>
    <employee id="508">

        <firstName>Vinod</firstName>
        <lastName>Kumar</lastName>
        <location>MGD</location>
    </employee>

    <employee id="509">

        <firstName>Raghu</firstName>
        <lastName>Reddy</lastName>
        <location>MBD</location>
    </employee>
    <employee id="510">

        <firstName>Uma Shankar</firstName>
        <lastName>Kommana</lastName>
        <location>DSNR</location>
    </employee>
</employees>
```

File Name : EmployeeParser.java

```
import org.w3c.dom.*;
import javax.xml.parsers.*;
import java.io.*;
public class EmployeeParsing {


public static void main(String[] args)throws Exception { DocumentBuilderFactory


factory = DocumentBuilderFactory.newInstance();
```

```
DocumentBuilder builder = factory.newDocumentBuilder();


Document document = builder.parse(new File("Users.xml"));


Element root = document.getDocumentElement();
BufferedReader br=new BufferedReader(new InputStreamReader(System.in)); System.out.println("Enter User
 Id");
String id=br.readLine();
//Get all employees
NodeList nList = document.getElementsByTagName("employee"); System.out.println(root.getNodeName());
System.out.println("============================");
for (int temp = 0; temp < nList.getLength(); temp++)
{
Node node = nList.item(temp);
System.out.println("");              //Just a separator
if (node.getNodeType() == Node.ELEMENT_NODE)
{
//Print employee's details of given id Element
eElement = (Element) node;
if(eElement.getAttribute("id").equals(id))
{
System.out.println("Employee id : " + eElement.getAttribute("id")); System.out.println("First
Name : "
+eElement.getElementsByTagName("firstName").item(0).getTextContent());
System.out.println("Last Name : "
+eElement.getElementsByTagName("lastName").item(0).getTextContent()); System.out.println("Location : "
+eElement.getElementsByTagName("location").item(0).getTextContent());
}    }    }
}
}
```

OUTPUT:



VIVA VOICE QUESTIONS:

EXPERIMENT 5:

1. **What is XML?**

   Ans: XML stands for *eXtensible Markup Language*. It is a simple and flexible markup language. It is known as universal language for data on the web because XML documentscan be created and used in any language. It is universal standard for information interchange.XML technology facilitates you to create your own markup language.

2. **What are the benefits of XML?**

   Ans: These are the main benefits of using XML.

   Simplicity: Very easy to read and understand the information coded in XML. **Openness:** It is a W3C standard, endorsed by software industry market leaders. **Extensibility:** It is extensible because it has no fixed set of tags. You can define them asyou need.

   Self-descriptive: XML documents do not need special schema set-up like traditional databases to store data. XML documents can be stored without such definitions, becausethey contain metadata in the form of tags and attributes.

   Scalable: XML is not in binary format so you can create and edit files with anything andit is also easy to debug.

   Fast access: XML documents are arranged in hierarchical form so it is comparativelyfaster.

3. **What is XSNL?**

   Ans: XSNL is an *XML search neutral language*. This language acts between the metasearch interface and targeted system.

4. **What is DTD?**
   Ans: DTD stands for *Document Type Definition*. It defines a leading building block of anXML document.

   It defines:

   Names of elements
   How and where they can be usedElement attributes
   Proper nesting

EXPERIMENT – 5 (B)

Create an xml document that contains 10 users information. Write a java program, which takes user id and returns the user details by taking from xml document using SAX Parser.

AIM: generating an xml file containing 10 users information. display the user details by taking user information from xml file using java program.

PROGRAM:

File Name : Student.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<students-details>
<student>
<studentid>561</studentid>
<name>Ramu</name>
<address>ECIL</address>
<gender>Male</gender>
</student>
<student>
<studentid>562</studentid>
<name>Ramya</name>
<address>KBHP</address>
<gender>Female</gender>
</student>
<student>
<studentid>563</studentid>
<name>Mahi</name>
<address>BHEL</address>
<gender>Male</gender>
```

```
</student>
<student>
<studentid>564</studentid>
<name>Manvi</name>
<address>KOTI</address>
<gender>Female</gender>
</student>
<student>
<studentid>565</studentid>
<name>Ammu</name>
<address>ECIL</address>
<gender>Female</gender>
</student>
</students-details>
```

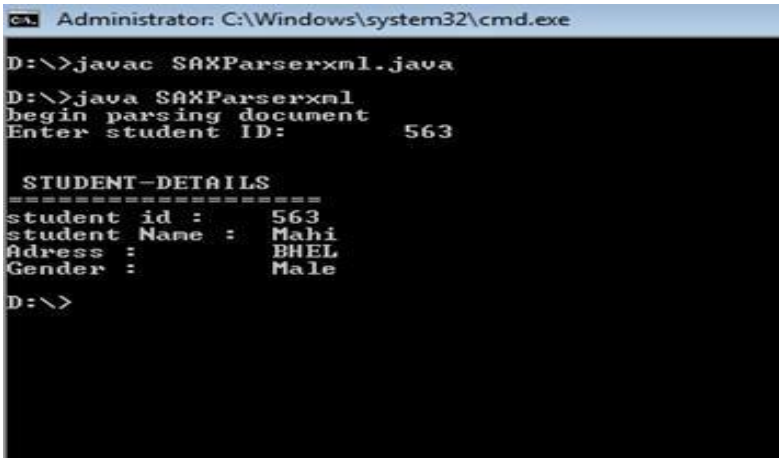
File Name : SAXParserxml.java

```
import java.io.*;
import javax.xml.parsers.SAXParser;
import javax.xml.parsers.SAXParserFactory; import
org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;
public class SAXParserxml extends DefaultHandler
{
boolean studentid = true,name = false,address = false,gender = false; int flag=0,c=0;
String sid,sname,sadd,sgender,tid; public void
startDocument()
{
System.out.println("begin parsing document"); System.out.print("Enter student ID:\t");
```

```
try{
BufferedReader reader = new BufferedReader(new InputStreamReader(System.in)); tid = reader.readLine();
}catch(Exception e){}
}
public void startElement(String url,String localname, String qName, Attributes att){ if
(qName.equalsIgnoreCase("studentid"))
{
studentid = true;
}
else if (qName.equalsIgnoreCase("name") && flag==1)
{
name = true;
}
else if (qName.equalsIgnoreCase("address")&& flag==1)
{
address = true;
}
else if (qName.equalsIgnoreCase("gender")&& flag==1)
{
gender = true;
}
}

public void characters(char[] ch,int start,int length){ if (studentid)
{
String x=new String(ch, start, length);
if(x.equals(tid))
{
flag=1;sid=x; c=1;
}
else
flag=0;
studentid = false;
}
else if (name)
{
sname=new String(ch, start, length); name = false;
}
else if (address)
{
sadd=new String(ch, start, length); address = false;
}
else if (gender)
{
sgender=new String(ch, start, length); gender = false;
```

```
}
}
public void endElement(String url,String localname, String qName){} public void
endDocument()
{
if(c==0)
System.out.println("student Id is not present.Try Again!!!"); else
{
System.out.println("\n\n STUDENT-DETAILS");
System.out.println("==================");
System.out.println("student id :\t" +sid);
System.out.println("student Name :\t" +sname);
System.out.println("Adress :\t" +sadd); System.out.println("Gender
:\t" +sgender);
}
}
public static void main(String[] arg)throws Exception{  SAXParser
p=SAXParserFactory.newInstance().newSAXParser();
p.parse(new FileInputStream("student.xml"), new SAXParserxml());
}
}
```

OUTPUT:



EXPERIMENT – 6 (i)

Implement the following web application using (a) PHP, (b) servlets and (c) JSP.

PROBLEM STATEMENT: USING PHP

A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in database and ifthe data matches a successful login page is returned otherwise a failure message is shown to theuser.

SOURCE CODE:

Index.html

```
<html>
<head>
   <title>PHP login system</title>

  </head>
<body bgcolor="yellow"  text="red">      <center>
        <h1>Login</h1>
      <form name="f1" action = "authentication.php" onsubmit = "return validation()" method = "POST">

          <b>  UserName:   <input type = "text" id ="user" name  = "user" />  <br> <br> <br>

           Password:    <input type = "password" id ="pass" name  = "pass" />   <br><br>

           <input type =  "submit" id = "btn" value = "Login" />
          </center>
      </form>


   <script>
        function validation()
        {
           var id=document.f1.user.value;
           var ps=document.f1.pass.value;
           if(id.length=="" && ps.length=="") {
              alert("User Name and Password fields are empty");
              return false;
           }
           else
           {
              if(id.length=="") {
                 alert("User Name is empty");
                 return false;
              }
              if (ps.length=="") {
              alert("Password field is empty");
              return false;
              }
```

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

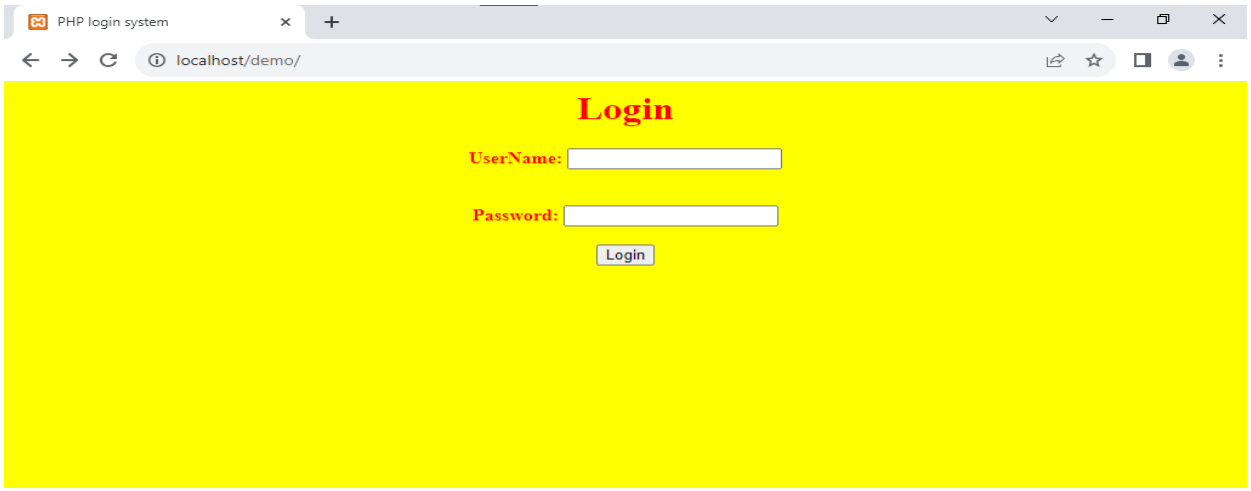
connection.php

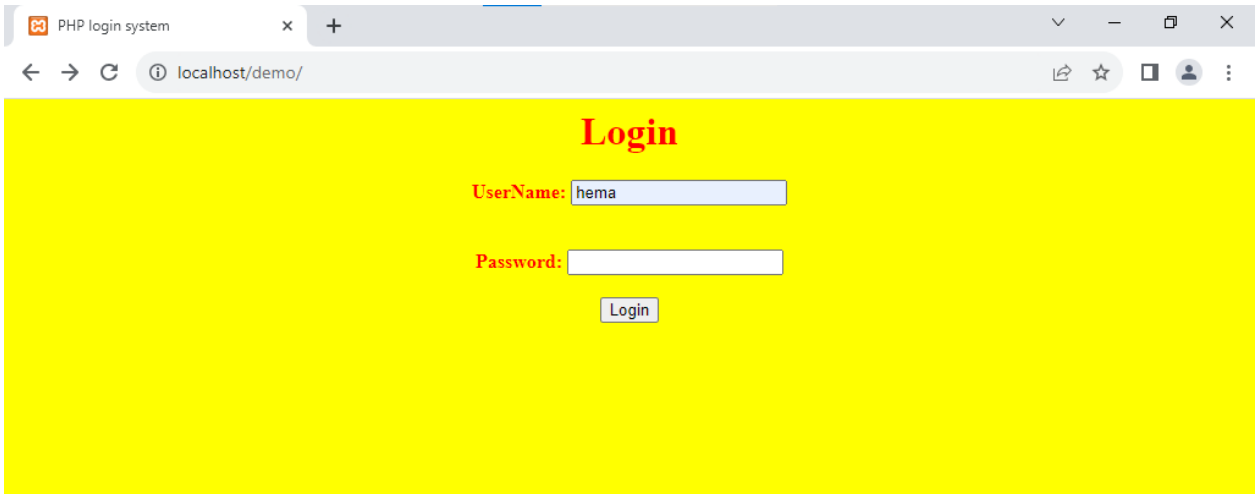
```
<?php
   $host = "localhost";
   $user = "root";
   $password = '';
   $db_name = "sasi";

   $con = mysqli_connect($host, $user, $password, $db_name);
   if(mysqli_connect_errno())
   {
      die("Failed to connect with MySQL: ". mysqli_connect_error());
   }
?>
```

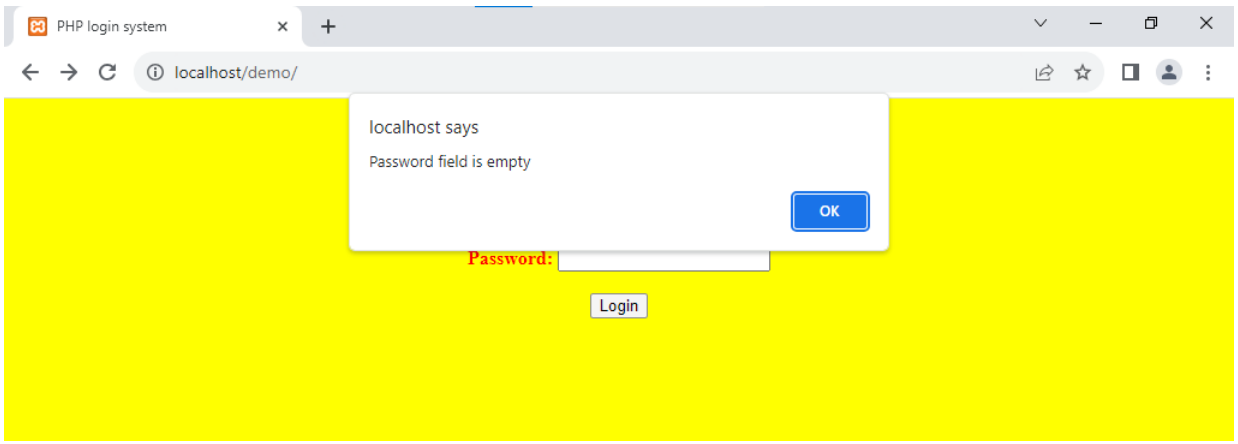
authentication.php

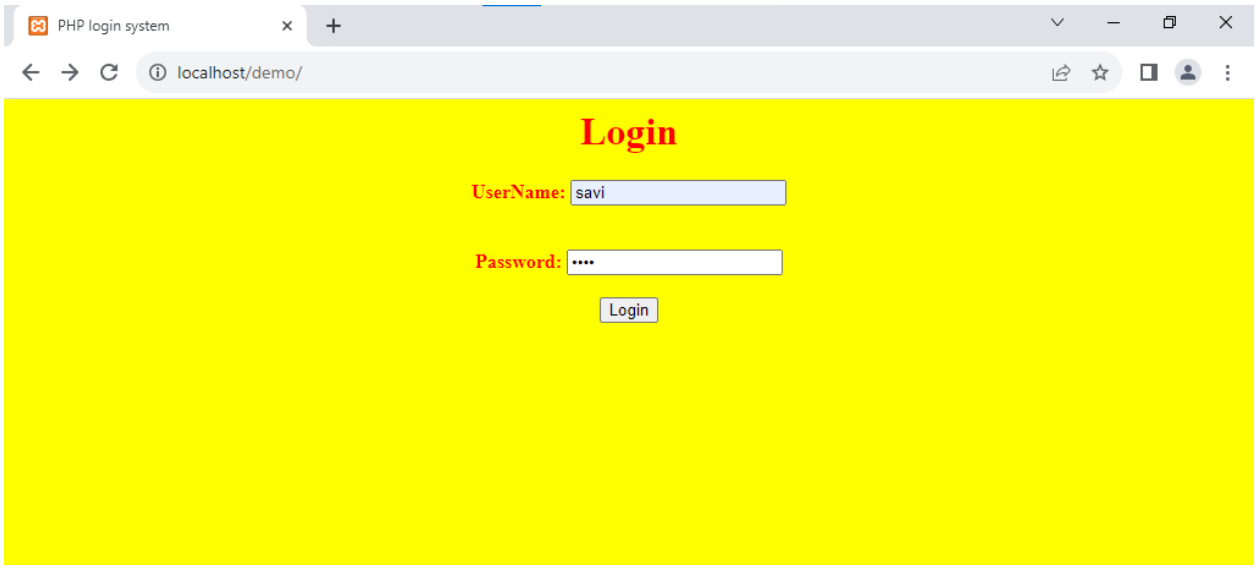
```
<?php
   include('connection.php');
   $username = $_POST['user'];
   $password = $_POST['pass'];


      $username = stripcslashes($username);
      $password = stripcslashes($password);
      $username = mysqli_real_escape_string($con, $username);
      $password = mysqli_real_escape_string($con, $password);

      $sql = "select * from login where username = '$username' and password = '$password'";
      $result = mysqli_query($con, $sql);
      $row = mysqli_fetch_array($result, MYSQLI_ASSOC);
      $count = mysqli_num_rows($result);

      if($count == 1){
         echo "<h1><center> Login successful </center></h1>";
      }
      else{
         echo "<h1> Login failed. Invalid username or password.</h1>";
      }
?>
```

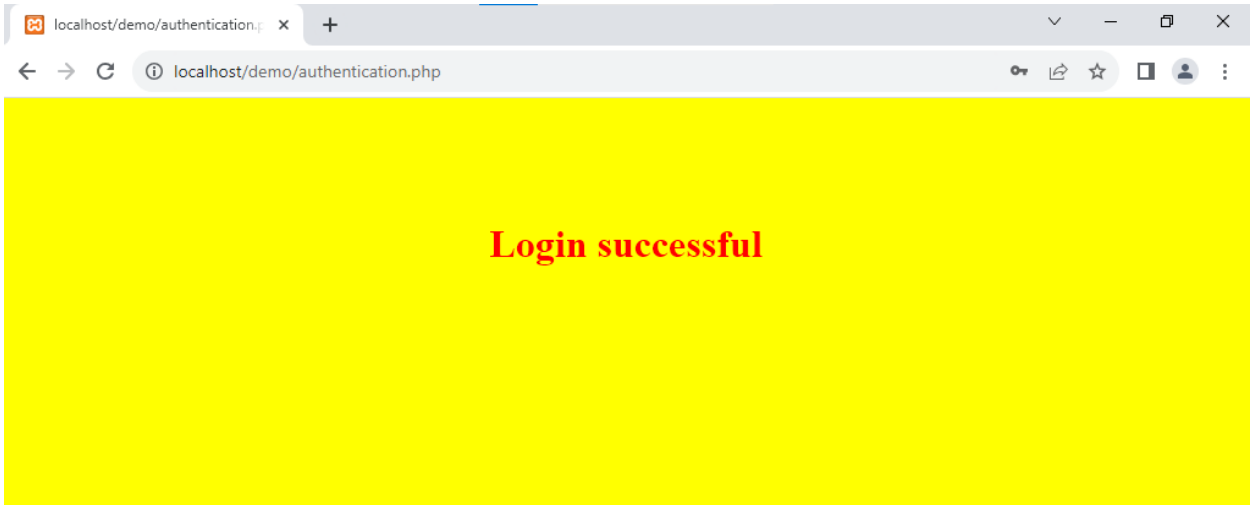
OUTPUT:

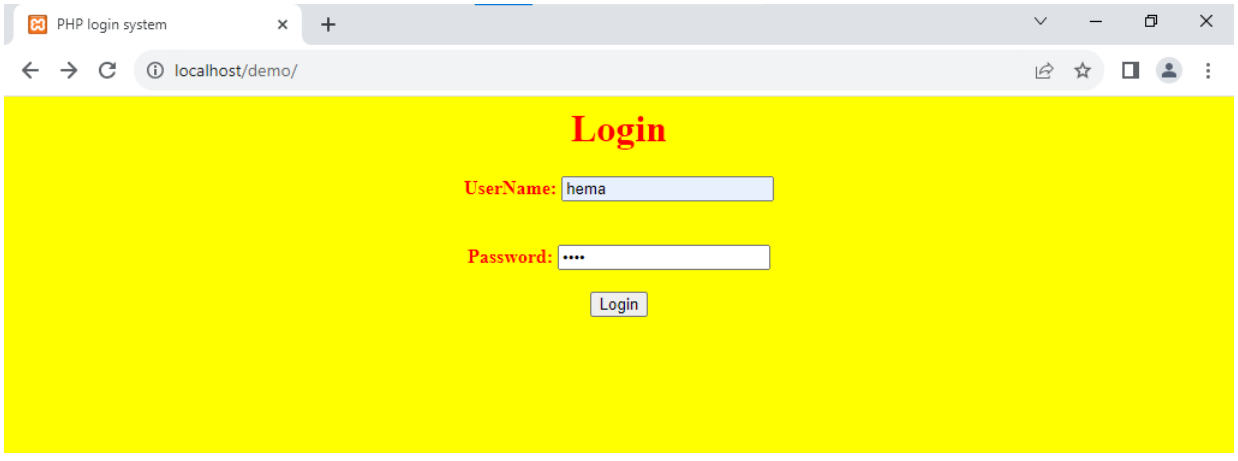

PHP login system
localhost/demo/
Login
UserName:
Password:
Login


PHP login system
localhost/demo/
Login
UserName:
hema
Password:
Login


PHP login system
localhost/demo/
localhost says
Password field is empty
OK
Password:
Login


PHP login system
localhost/demo/
Login
UserName: savi
Password: ••••
Login


localhost/demo/authentication.php
Login successful


PHP login system
localhost/demo/
Login
UserName: hema
Password: ••••
Login

EXPERIMENT – 6 (ii)

PROBLEM STATEMENT:

USING PHP

- A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in database and if the data matches a successful login page is returned otherwise a failure message is shown to the user.

users.xml

```
<?xml version="1.0"?>
<users>
<user>
<userid>madhu</userid>
<password>12345</password>
</user>
<user>
<userid>naveen</userid>
<password>12345</password>
</user>
<user>
<userid>durga</userid>
<password>12345</password>
</user>
<user>
<userid>ramesh</userid>
<password>12345</password>
</user>
```

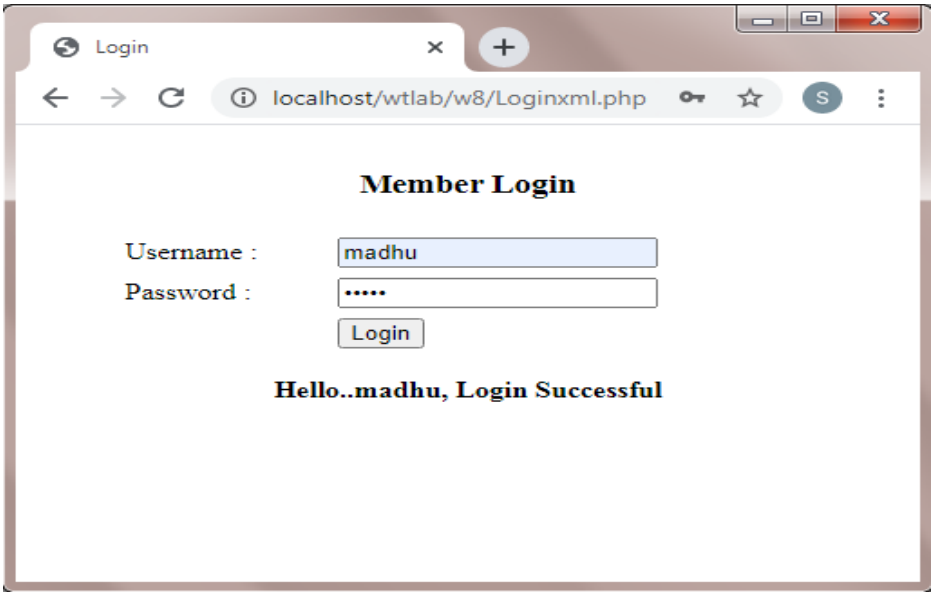
```
</users>
```

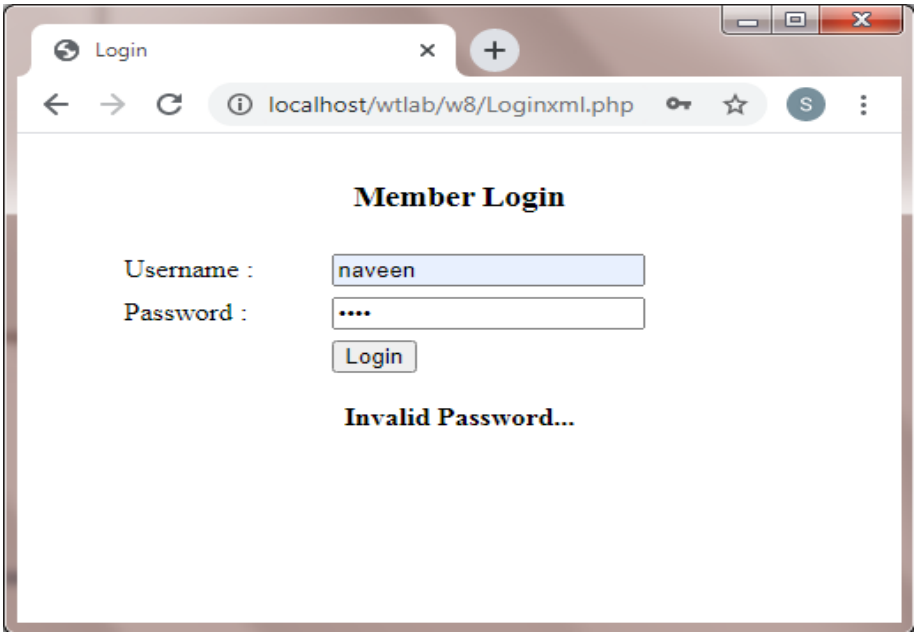
Loginxml.php

```
<html>
<head>
<title>Login </title>
</head>
<body>
<form name="form1" method="post">
<table align="center" width="80%" border="0" cellpadding="3" cellspacing="1">
<tr >
<td colspan=2 align="center">
<b><h3>Member Login</h3> </b></td>
</tr>
<br/>
<tr>
<td>Username  : </td>
<td><input name="uname" type="text"></td>
</tr>
<tr>
<td>Password  : </td>
<td><input name="pwd" type="password"></td>
</tr>
<tr>
<td></td>
<td ><input type="submit" name="Submit" value="Login"></td>
</tr>
</table>
</form>
<?php if(isset($_POST["Submit"]))
{
$uname=$_POST["uname"];
$pwd=$_POST["pwd"];
$xml=simplexml_load_file("users.xml") or die("Error: Cannot create object"); foreach($xml-
>children() as $users)
{
    if($users->userid==$uname)
    {
        if($users->password==$pwd)
        {
            echo "<center><b>Hello..".$uname . ", "; echo "Login
            Successful</b></center> "; return;
        }
        else
        {
```

```
            echo "<center><b>Invalid Password...</b></center>"; return;
        }

    }
}
        echo "<center><b>Invalid Login..</b></center>";
}
?>
</body>
</html>
```

OUTPUT:


Login
localhost/wtlab/w8/Loginxml.php
Member Login
Username :
madhu
Password :
Login
Hello..madhu, Login Successful


Login
localhost/wtlab/w8/Loginxml.php
Member Login
Username :
naveen
Password :
Login
Invalid Password...

EXPERIMENT – 6 (iii)

Aim:

A user validation page web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in database and if the data matches, a successful login Message is returned. Otherwise a failure message is shown to the user. Use AJAX to show the result on the same page below the button.

Source Code:

login.xml

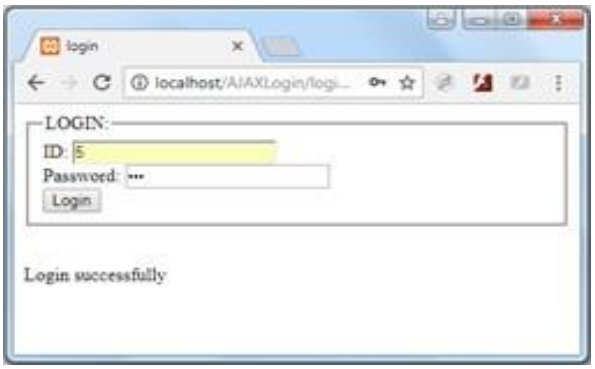
```
<?xml version="1.0" encoding="UTF-8"?>
<student>
<login>
<id>5</id>
<password>cse</password>
</login>
<login>
<id>4</id>
<password>ece</password>
</login>
</student>
```

Loginajax.html

```
<html>
<head>
<title>login</title>
</head>
<body>
<script language="javascript" type="text/javascript">
<!--
function ajaxFunction(){
var ajaxRequest; try{
ajaxRequest = new XMLHttpRequest();
} catch (e){
try{
jaxRequest = new ActiveXObject("Msxml2.XMLHTTP");
} catch (e) { try{
ajaxRequest = new ActiveXObject("Microsoft.XMLHTTP");
} catch (e){
alert("Your browser broke!"); return false;
}
}
}
ajaxRequest.onreadystatechange = function(){
if(ajaxRequest.readyState == 4 && ajaxRequest.status == 200)
{
document.getElementById("txtHint").innerHTML = ajaxRequest.responseText;
```

```
}
}
var id = document.getElementById('id').value;
var password = document.getElementById('password').value;
var queryString = "?id=" + id + "&password=" + password ;
}
ajaxRequest.open("GET", "login.php" + queryString, true); ajaxRequest.send();
</script>
<form name='myForm'>
<fieldset>
<legend>LOGIN:</legend>
ID: <input type='text' id='id' /> <br />
Password: <input type='password' id='password' />
<br />
<input type='button' onclick='ajaxFunction()' value='Login' />
</fieldset>
</form>
<br>
<div id="txtHint"><b> </b></div>
</body>
</html>
```

Output:



VIVA VOICE QUESTIONS:

EXPERIMENT 6:

1. **What is PHP?**
   Ans: PHP is a server side scripting language commonly used for web applications. PHPhas many frameworks and cms for creating websites. Even a non technical person can create sites using its CMS.WordPress, osCommerce are the famus CMS of php.It is alsoan object oriented programming language like java, C-sharp etc. It is very easy for learning

2. **What's the difference between include and require?**
   Ans: If the file is not found by require(), it will cause a fatal error and halt the executionof the script. If the file is not found by include(), a warning will be issued, but executionwill continue.

3. What is the use of "echo" in php?

Ans: It is used to print a data in the webpage, Example: <?php echo 'Car insurance'; ?> ,The following code print the text in the webpage

4. What is Ajax?

Ans: Ajax is abbreviated as Asynchronous Javascript and XML. It is new technique usedto create better, faster and more interactive web systems or applications. Ajax uses asynchronous data transfer between the Browser and the web server. This technique is used to make internet faster and user friendly. It is not a programming language.

5. What are the advantages of Ajax?

Ans: Following are the advantages of Ajax:

Bandwidth utilization – It saves memory when the data is fetched from the same page.More interactive
Speeder retrieval of data

6. Which are the two methods used for cross domain Ajax calls?

Ans: There are two methods used to transfer data between the two more securitydomains:
CROS – Cross Origin Resource Sharing and it works with the HTTP web browsers JSONP – JSON with padding which works with the HTTP GET and on legacy browsers

EXPERIMENT – 6 (iv)

PROBLEM STATEMENT: A sample calculator web application that takes two numbers and an operator(+,-,*,/,%) from an HTML page and returns the result page with the operation performed on the operands.

SOURCE CODE:

calc.php

```
<html>
<head>
<title>calculator</title>
<script language="javascript">
function validateForm()
{
first=document.f1.fvalue.value;
second=document.f1.lvalue.value; if(first=="")
{
        alert("enter value");
        document.f1.fvalue.focus();
        return false;
}

if(isNaN(first))

{

        alert("must enter number");
        document.f1.fvalue.focus(); return false;
}
if(document.f1.operator.value=="")

{

        alert("choose operator"); document.f1.operator.focus(); return
        false;
}
if(second=="")

{
        alert("enter value");
        document.f1.lvalue.focus();return false;
}
```

```
if(isNaN(second))

{
        alert("must enter number");
        document.f1.lvalue.focus(); return false;
}

return true;

}

</script>
</head>
<body>
<form name="f1" method="post" action="success.php" onsubmit="return validateForm();">

<table cellpadding="5" cellspacing="5" border="0">
        <tr>

            <td>Enter First Number</td>

            <td colspan="1"><input name="fvalue" id="fvalue" type="text"/></td>

        <tr>

            <td>Select Operator</td>

            <td><select name="operator">

                                        <option selected value=""> choose operator</option>

                                        <option value="+">+</option>

                                        <option value="-">-</option>

                                        <option value="*">*</option>

                                        <option value="/">/</option>

                                        <option value="%">%</option>
                                        </select></td>

        </tr>

        <tr>

            <td>Enter second Number</td>

            <td><input name="lvalue" type="text" id="lvalue"/></td>
```

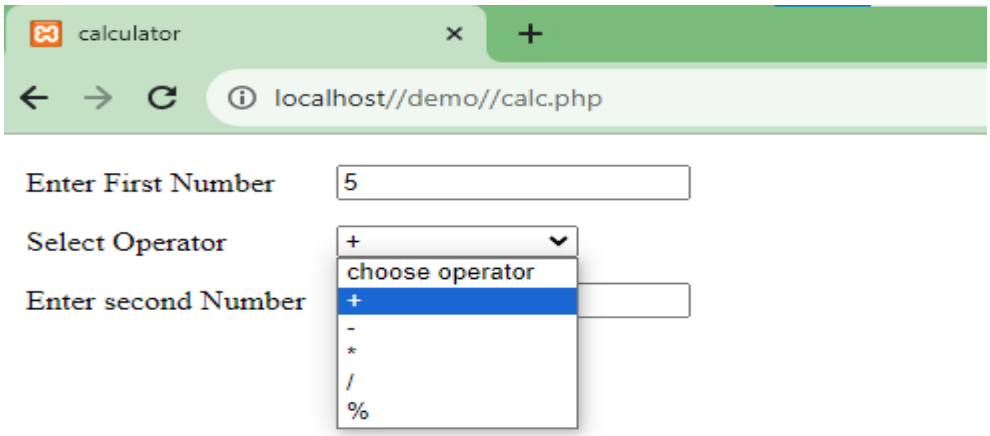
```
</tr>

<tr>

   <td></td>

   <td><input type="submit" name="calculate" value="Calculate" /></td>

</tr>

        </table>

</form>

</body>
</html>
```

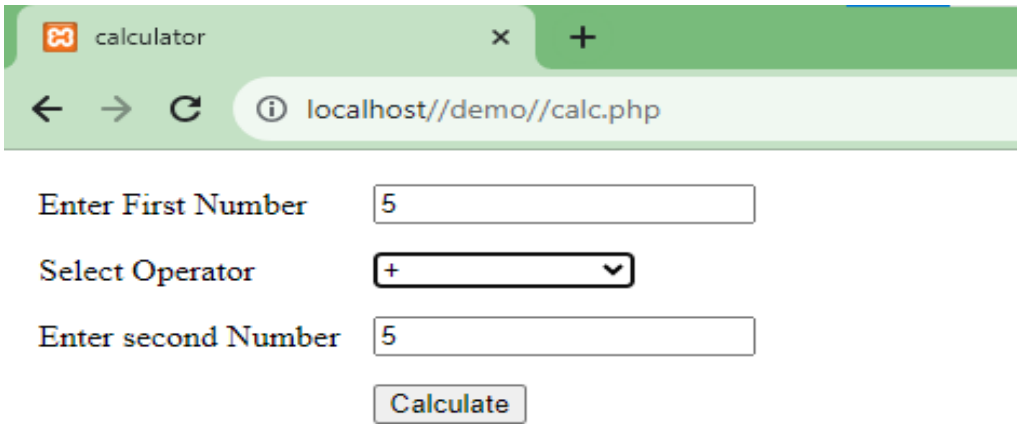
success.php

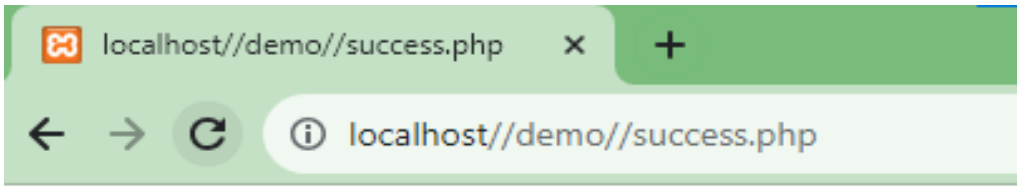
```
<?php

if( isset( $_REQUEST['calculate']))

{

        $operator =
        $_REQUEST['operator'];
        if($operator == "+")
        {

                $add1 = $_REQUEST['fvalue'];

                $add2 = $_REQUEST['lvalue'];

                $res = $add1 + $add2;

                $result = 'SUM';

        }

        if($operator == "-")

        {

                $add1 = $_REQUEST['fvalue'];

                $add2 = $_REQUEST['lvalue'];

                $res = $add1 - $add2;
```

```
                $result = 'DIFFERENCE';

        }

        if($operator == "*")

        {
                $add1 = $_REQUEST['fvalue'];
                $add2 = $_REQUEST['lvalue'];
                $res  = $add1 * $add2;
                $result = 'PRODUCT';

        }
        if($operator == "/")

        {
                $add1 = $_REQUEST['fvalue'];
                $add2 = $_REQUEST['lvalue'];
                $res= $add1 / $add2;
                $result = 'DIVISION';

        }

        if($operator == "%")

        {
                $add1 = $_REQUEST['fvalue'];
                $add2 = $_REQUEST['lvalue'];
                $res= $add1 % $add2;
                $result = 'REMAINDER';

        }

}

?>

<?php echo "The <strong>".$result."</strong> Of <strong>".$add1."</strong> And
<strong>".$add2."</strong> Is <strong>". $res."</strong>"; ?>

<br/><br/><a href="calc.php">click Here</a> To Go Back To Calculator
```

OUTPUT:







The **SUM** Of **5** And **5** Is **10**

click Here To Go Back To Calculator

VIVA VOICE QUESTIONS:

EXPERIMENT 6(IV):

1. **What hierarchy is being followed when in style sheets?**

Ans: Inline style takes priority over embedded style sheets.
Embedded style take priority over external style sheets.
If a single selector includes three different style definitions, the definition that isclosest to the actual tag gets the priority.

2. **What are new Media Elements in HTML5?**

Ans: Following are the New Media Elements are present in HTML5:

1. **<audio> tag :** For playing audio.
2. **<video> tag :** For playing video.
3. **<source> tag :** For media resources for media elements.
4. **<embed> tag :** For embedded content.
5. **<track> tag :** For text tracks used in media players.

3. **How to insert Javascript in HTML?**

Ans: We can insert JavaScript in HTML using <Script tag>. JavaScript can be enclosedin <script type = text/javascript> and ending with </script>.

4. **The differences between HTML and XHTML are:**

1. HTML is application of Standard Generalized Markup Language(SGML) whereasXML is application of Extensible Markup Language(XML).

2. HTML is a static Web Page whereas XHTML is dynamic Web Page.

3. HTML allows programmer to perform changes in the tags and use attribute minimization whereas XHTML when user need a new markup tag then user can define itin this.

4. HTML is about displaying information whereas XHTML is about describing theinformation.

5. **What are life cycle methods of a servlet?**

Ans: Servlet Life Cycle consists of three methods:
public void init(ServletConfig config) – This method is used by container to initialize theservlet, this method is invoked only once in the lifecycle of servlet.
public void service(ServletRequest request, ServletResponse response) – This method iscalled once for every request, container can‟t invoke service() method until unless init() method is executed.
public void destroy() – This method is invoked once when servlet is unloaded frommemory.

EXPERIMENT – 6 (v)

Aim:

Modify the above program (Simple Calculator) such that it stores each query in a database and checks the database first for the result. If the query is already available in the DB, it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.

Source Code:

Simplecalcdb.html

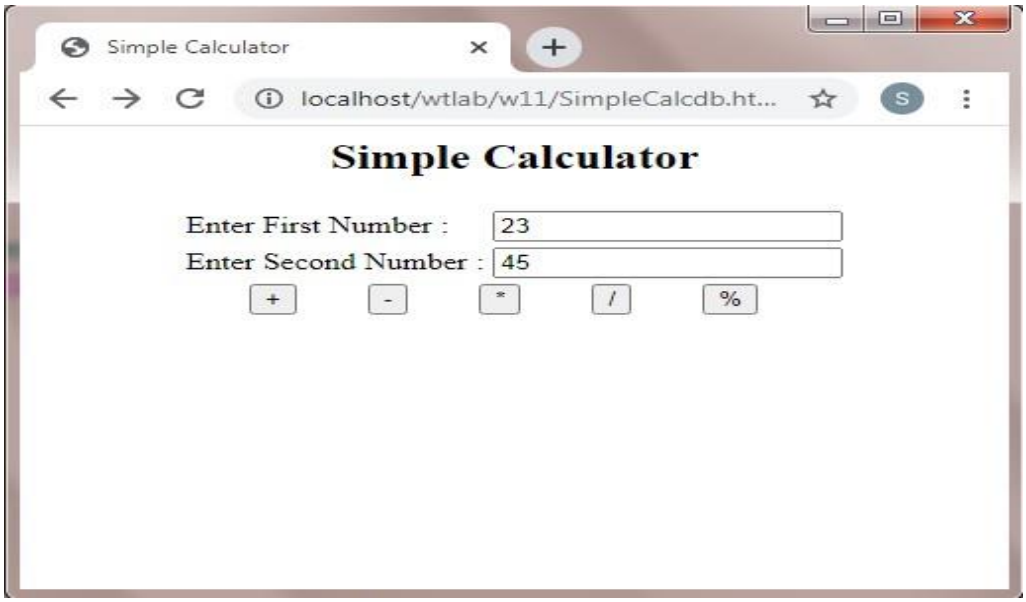
```
<html>
<head>
<title>Simple Calculator</title>
</head>
<body>
<h2 align="center">Simple Calculator</h2>
<form method="post" action="Simplecalcdb.php">
<table align="center">
<tr>
<td>Enter First Number :
</td>
<td><input type="text" name="fnum" required></input>
</td>
</tr>
<tr>
<td>Enter Second Number :
</td>
<td><input type="text" name="snum" required></input>
</td>
</tr>
<tr>
<td colspan=2>       
<input type="submit" name="op" value="+"></input>        
<input type="submit" name="op" value="-"></input>        
<input type="submit" name="op" value="*"></input>        
<input type="submit" name="op" value="/"></input>        
<input type="submit" name="op" value="%"></input>
</td>
</tr>
</table>
</form>
</body>
</html>
```

Simplecalcdb.php

```
<?php
$num1=$_POST["fnum"];
$num2=$_POST["snum"];
$op=$_POST["op"];
$res="";
if($num2=="0" && ($op=="/" || $op=="%"))
{
   echo "Division by zero is Not Possible";
}
else
{
   $host = 'localhost';
   $user = 'root';
   $pass = '';
   $dbname='cal';
   $conn = mysqli_connect($host, $user, $pass,$dbname);
   $sql = "SELECT * FROM results where Num1='$num1' and Num2='$num2' and Operator='$op'";
   $retval=mysqli_query($conn, $sql);
   if(mysqli_num_rows($retval) > 0){
   while($row = mysqli_fetch_assoc($retval))
   {
      echo "First Number is :{$row['Num1']}  <br> ".
          "Second Number is : {$row['Num2']} <br> ".
          "Operator is :  {$row['Operator']} <br> ".
          "Result is : {$row['Result']} <br>";
   }
   }
   else
   {
   echo "First Number is : ".$num1."<br/>";
   echo "Second Number is : ".$num2."<br/>";
   echo "Operator is : ".$op."<br/>";

   if($op=="+")
   {
      $res=$num1+$num2;
      echo "Additon is : ".$res;
   }

   if($op=="-")
   {
      $res=$num1-$num2;
      echo "Subtraction is : ".$res;
   }

   if($op=="*")
   {
      $res=$num1*$num2;
      echo "Multiplication is : ".$res;
   }

   if($op=="/")
   {
```

```
        $res=$num1/$num2;
        echo "Division is : ".$res;
    }

    if($op=="%")
    {
        $res=$num1%$num2;
        echo "Modulus is : ".$res;
    }
    $query="insert into results values('".$num1."','".$num2."','".$op."','".$res."')";
    mysqli_query($conn, $query);
    }
    mysqli_close($conn);
}
?>
```

Output:



EXPERIMENT – 6 (vi)

PROGRAM STATEMENT:

A web application which takes name as input and displays a page with Hello <name>, logout button and start time on right corner and display another page with thank <name> and duration of usage. (hint: Use session to store name and time).

PROGRAM: web application displaying the user given name along with session duration.

SOURCE CODE:

sessionnt.php

```
<html>
<head>
<title> session time </title>
</head>
```

```
<body>
<form action="logout.php" method="POST">
Enter name<input type="text" name="name" value=""/>
<input type="submit" name="submit" value="submit"/>
</form>
</body>
</html>
```

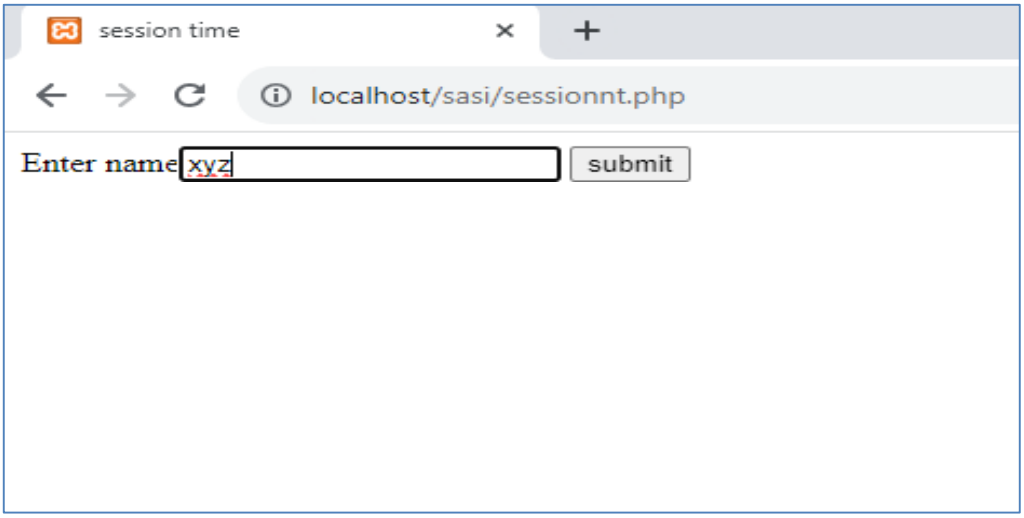
logout.php

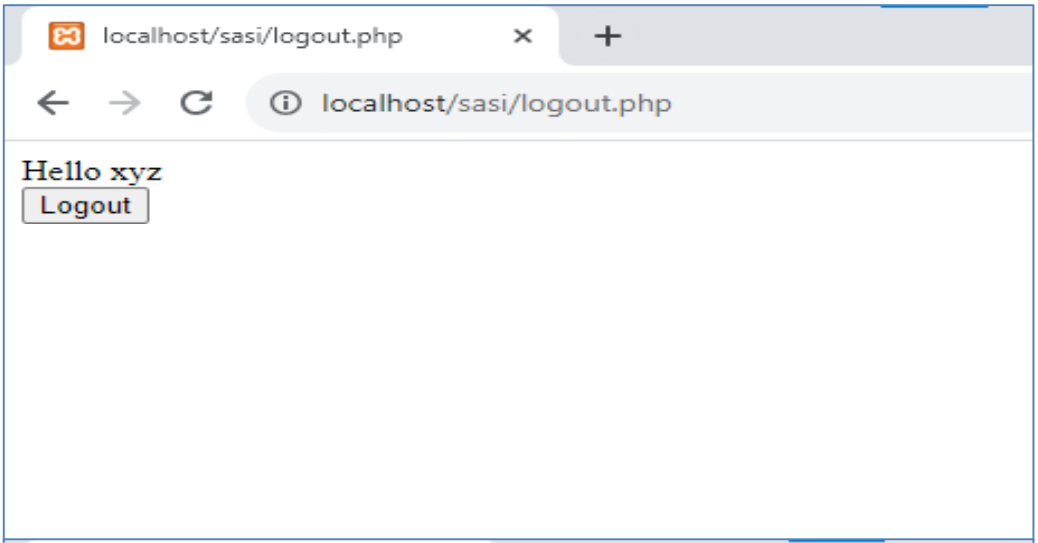
```
<?php session_st art();
$_SESSION['name']=$_POST['name'];
if (!isset($_SESSION['start_time']))
{
   $str_time = time();
   $_SESSION['start_time'] = $str_time;
}?>
<html>
<body>
<div>
<span style="float:right">
<?php

echo date("H:i:s",$_SESSION['start_time']);?></span>
</div>
<?php echo "Hello ".$_POST['name'];?><br>
<form action="logoutsession.php" method="POST">
<input type="submit" name="submit" value="Logout">
</body>
</html>
```

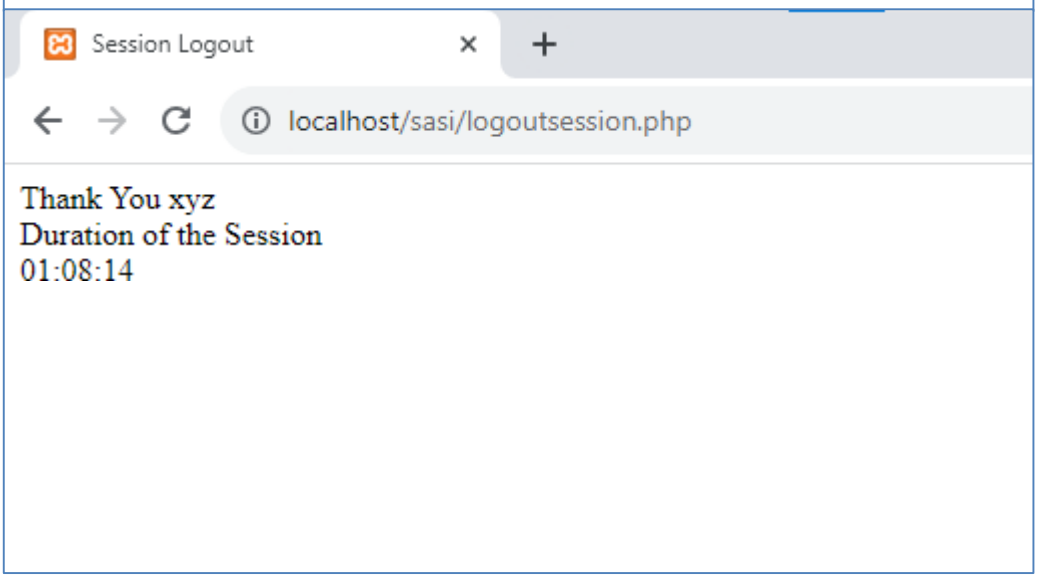
logoutsession.php

```
<?php
session_start();
$duration=time()-$_SESSION['start_time'];?>
<html>
<head> <title> Session Logout </title></head>
<body>
<?php echo "Thank You ".$_SESSION['name']."<br>". "Duration of the
Session"."<br>".date("H:i:s",$duration);?>
</body>
</html>
```

OUTPUT:


session time
localhost/sasi/sessionnt.php
Enter name xyz
submit


localhost/sasi/logout.php
localhost/sasi/logout.php
Hello xyz
Logout


Session Logout
localhost/sasi/logoutsession.php
Thank You xyz
Duration of the Session
01:08:14

EXPERIMENT – 6 (vii)

PROBLEM STATEMENT:

A web application that takes name and age from an HTML page. If the age is less than 18, itshould send a page with “Hello <name>, you are not authorized to visit this site” message, where

<name> should be replaced with the entered name. Otherwise it should send “Welcome <name>to this site” message.

AIM: To display appropriate page based on user age. PROGRAM:

userform.php

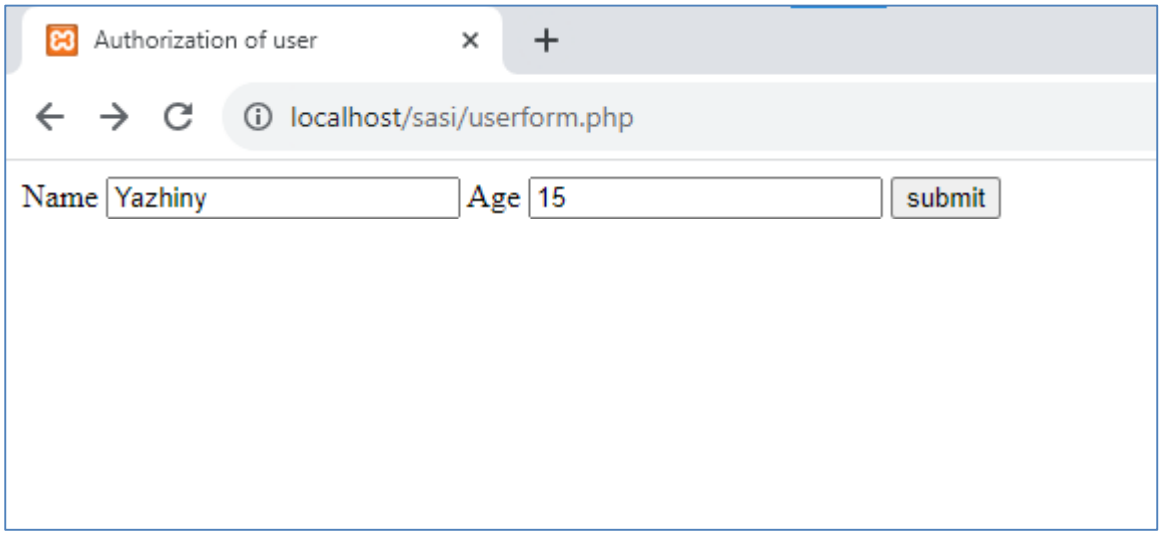
```
<html>

<head>

<title> Authorization of user</title>

<body>
<form     action="authenticate.php"      method="POST">

Name <input type="text" name="name" value=""/> Age

<input type="text" name="age" value=""/>

<input type="submit" value="submit"/>

</form>

</body>

</html>
```

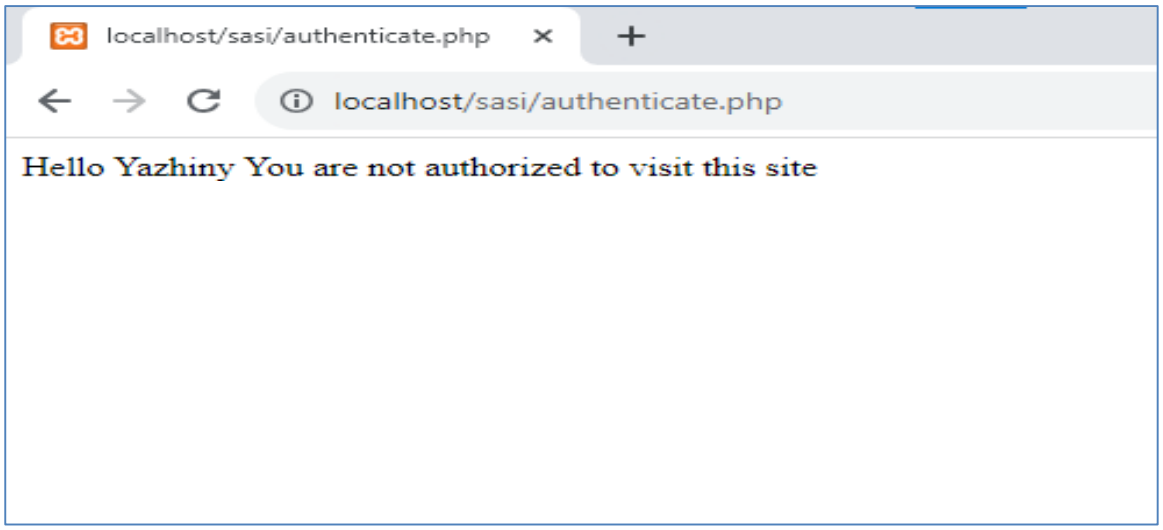
authenitcate.php

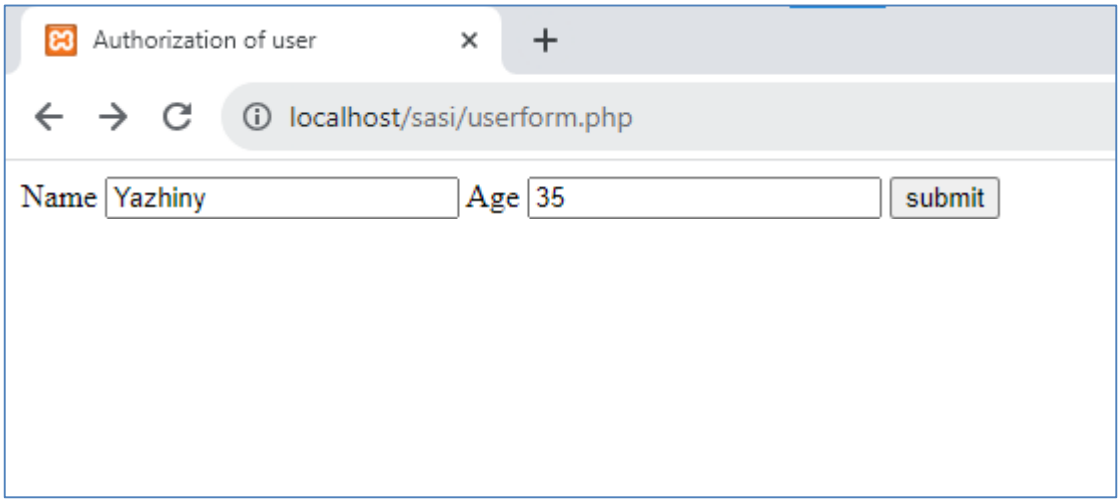
```
<?php if($_POST['age']<18)

{
echo "Hello ".$_POST['name']." You are not authorized to visit this site";
}
```

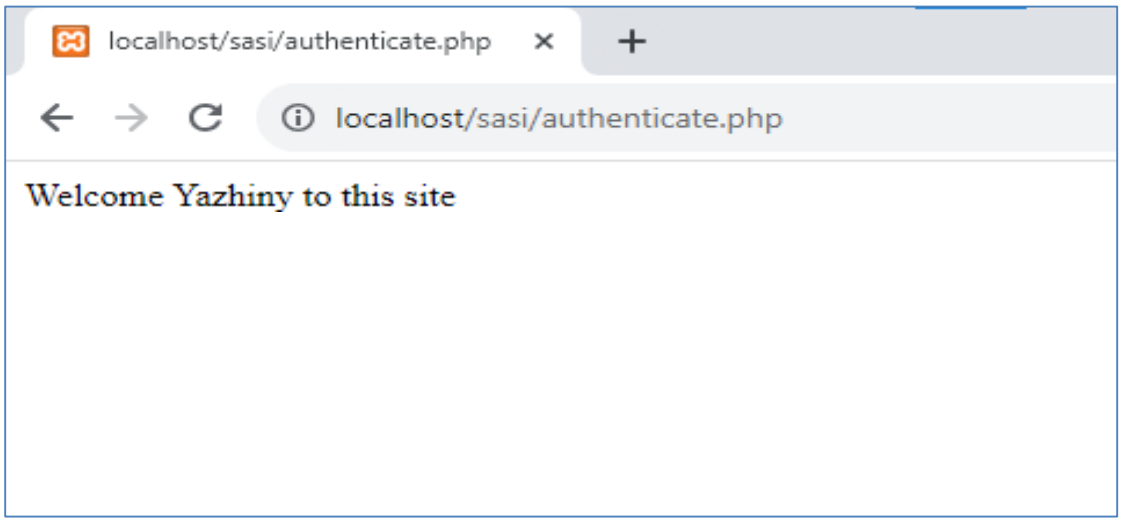
```
else {
echo "Welcome ".$_POST['name']." to this site";
}
 ?>
```

OUTPUT:









VIVA VOICE QUESTIONS:

EXPERIMENT 6(VII):

1. **What is the difference between GET and POST method?**

   Ans: GET is a safe method (idempotent) where POST is non-idempotent method.

   We can send limited data with GET method and it‟s sent in the header request URLwhereas we can send large amount of data with POST because it‟s part of the body.

   GET method is not secure because data is exposed in the URL and we can easily bookmark it and send similar request again, POST is secure because data is sent inrequest body and we can‟t bookmark it.

   GET is the default HTTP method whereas we need to specify method as POST to sendrequest with POST method. Hyperlinks in a page use GET method.

2. **What is a servlet?**
   Ans: Java Servlet is server side technologies to extend the capability of web servers byproviding support for dynamic response and data persistence.

3. **What is difference between ServletConfig and ServletContext?**
   Ans:Some of the differences between ServletConfig and ServletContext are:
   ServletConfig is a unique object per servlet whereas ServletContext is a unique object forcomplete application. ServletConfig is used to provide init parameters to the servlet whereas ServletContext isused to provide

application level init parameters that all other servlets can use.

We can‟t set attributes in ServletConfig object whereas we can set attributes inServletContext that other servlets can use in their implementation.

4. **What is difference between PrintWriter and ServletOutputStream?**

Ans: PrintWriter is a character-stream class whereas ServletOutputStream is a byte- stream class. We can use PrintWriter to write character based information such as character array and String to the response whereas we can use ServletOutputStream towrite byte array data to the response.
We can use ServletResponse getWriter() to get the PrintWriter instance whereas we canuse ServletResponse getOutputStream() method to get the ServletOutputStream object reference.

EXPERIMENT – 6 (viii)

Aim:

A web application for implementation: The user is first served a login page which takes user's name and password. After submitting the details the server checks these values against the data from a database and takes the following decisions. • If name and password matches serves a welcome page with user's full name. • If name and password doesn't match, then serves "password mismatch" page. • If name is not found in the database, serves a registration page, where user's full name is asked and on submitting the full name, it stores, the login name, password and full name in the database (hint: use session for storing data, submitted login name and password).

Source Code:

Logindemo.php

```
<html>
<head>
<title>Login </title>
</head>
<body>
<form name="form1" method="post">
<table align="center" width="70%" border="0" cellpadding="3" cellspacing="1">
<tr >
<td colspan=2 align="center">
<b><h3>Member Login</h3> </b></td>
</tr>
<br/>
<tr>
<td>Username  : </td>
<td><input name="uname" type="text"></td>
</tr>
<tr>
<td>Password  : </td>
<td><input name="pwd" type="password"></td>
</tr>
```

```
<tr>
<td></td>
<td ><input type="submit" name="btnlog" value="Login"></td>
</tr>
</table>
<br/>
<br/>
<center><h4>For Registeration : <a href="Registrationdemo.php">Click Here</a></h4></center>
</form>
<?php
if(isset($_POST['btnlog']))
{
$host = 'localhost';
$user = 'root';
$pass = '';
$dbname='Sampledb';
$conn = mysqli_connect($host, $user, $pass,$dbname);
$uname=$_POST["uname"];
$pwd=$_POST["pwd"];
$sql = "SELECT * FROM persons where UserId='$uname'";
$retval=mysqli_query($conn, $sql);
if(mysqli_num_rows($retval) > 0)
{
while($row = mysqli_fetch_assoc($retval))
{
if($row["Password"]==$pwd)
{
session_start();
$_SESSION["fname"]=$row["Fname"];
header('Location: Welcomedemo.php');
}
else
{
echo " <center><b><font color='red'>Password Mismatch </font></b></center>";
}
}
}
else
{
   header('Location: Registrationdemo.php');
// echo "<center><b><font color='red'>User Not Exist.. Please Register</font></b></center>";
}
mysqli_close($conn);
}
?>
</body>
</html>
```

Registrationdemo.php

```
<html>
<head>
<title>Registration </title>
</head>
<body>
<form name="form1" method="post">
<table align="center" width="70%" border="0" cellpadding="3" cellspacing="1">
<tr >
<td colspan=2 align="center">
<b><h3>User Registration</h3> </b></td>
</tr>
<br/>
<tr>
<td>Full name  : </td>
<td><input name="fname" type="text"></td>
</tr>
<tr>
<td>Username  : </td>
<td><input name="uname" type="text"></td>
</tr>
<tr>
<td>Password  : </td>
<td><input name="pwd" type="password"></td>
</tr>

<tr>
<td></td>
<td ><input type="submit" name="btnreg" value="Register"></td>
</tr>
</table>
<br/>
<br/>
<center><h4>For Login : <a href="LoginDemo.php">Click Here</a></h4></center>
</form>
<?php
if(isset($_POST['btnreg']))
{
$host = 'localhost';
$user = 'root';
$pass = '';
$dbname='Sampledb';
$conn = mysqli_connect($host, $user, $pass,$dbname);
$fname=$_POST["fname"];
$uname=$_POST["uname"];
$pwd=$_POST["pwd"];
$sql = "insert into persons values('$fname','$uname','$pwd')";
if(mysqli_query($conn, $sql))
{
echo "<center><b><font color='green'>Registration Successful</font></b></center>";
}
else
```

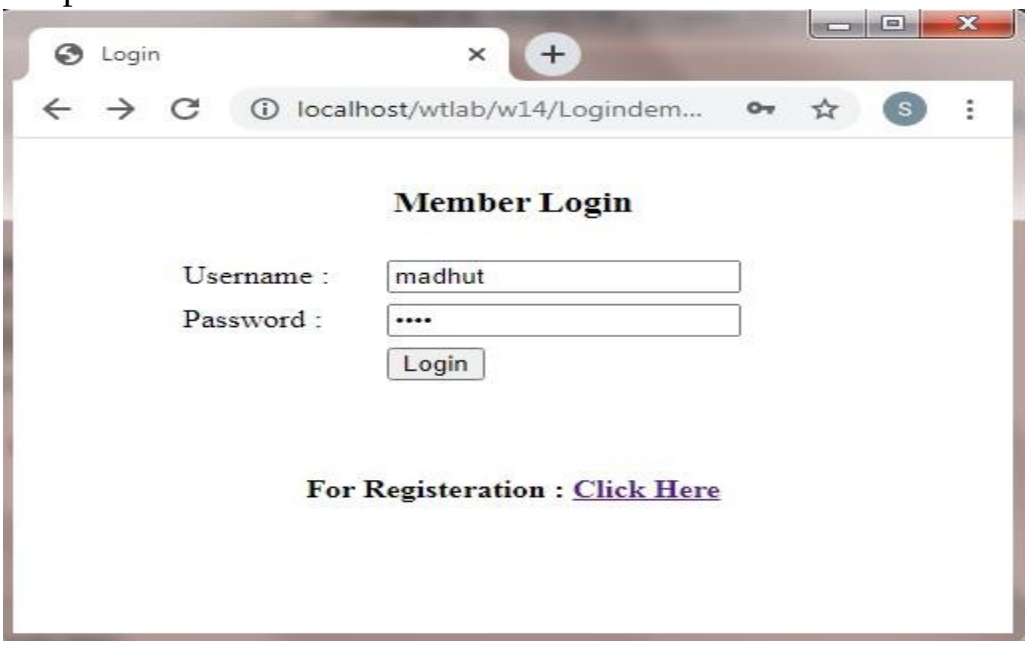
```
{
echo "<center><b><font color='red'>Registration failure</font></b></center>";
}
mysqli_close($conn);
}
?>
</body>
</html>
```

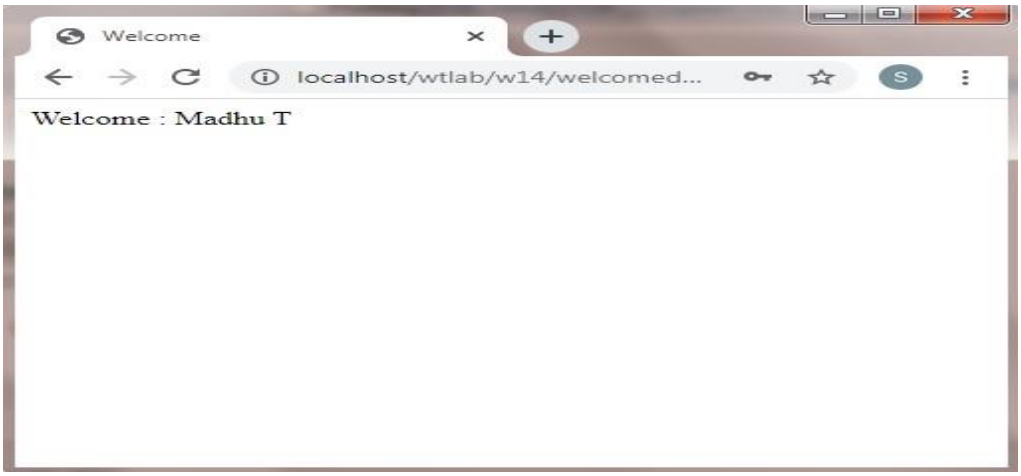
Welcomedemo.php

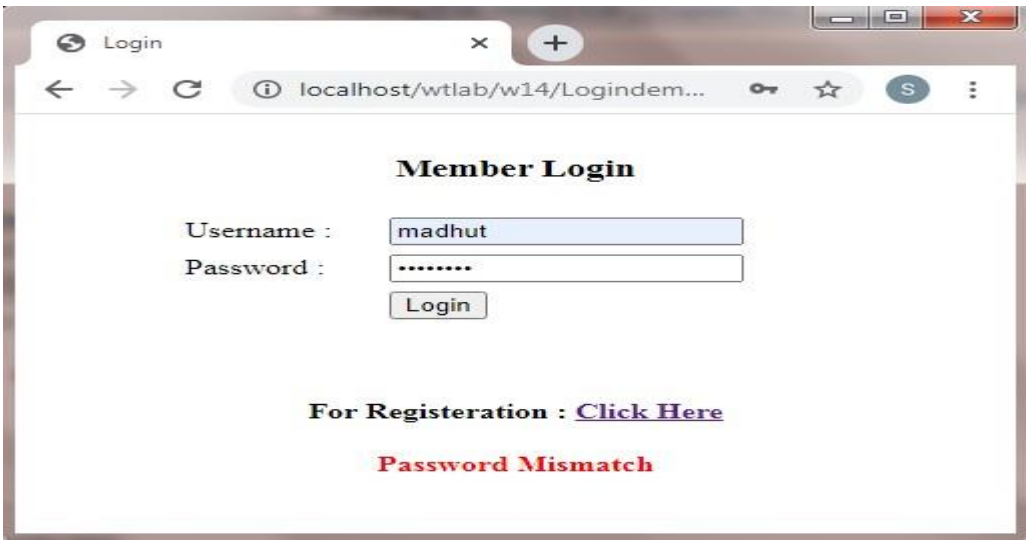
Warning: highlight_file(wt/Welcomedemo.php): failed to open stream: No such file or directory in /home/u681245571/domains/studyglance.in/public_html/labprograms/wtdisplay.php on line 112

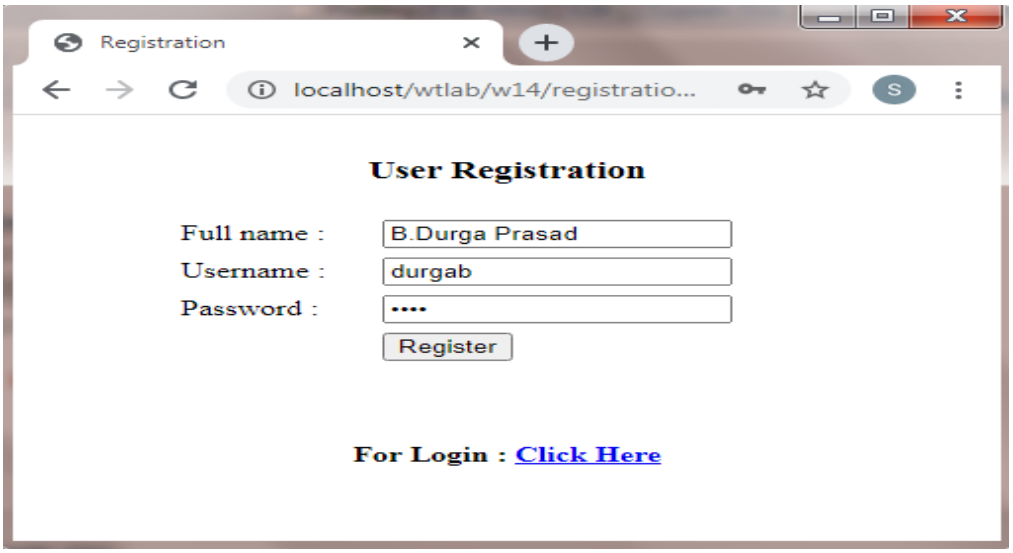
Warning: highlight_file(): Failed opening 'wt/Welcomedemo.php' for highlighting in /home/u681245571/domains/studyglance.in/public_html/labprograms/wtdisplay.php on line 112

Output:






Login
localhost/wtlab/w14/Logindem...
Member Login
Username :
madhut
Password :
Login
For Registeration : Click Here
Password Mismatch


Registration
localhost/wtlab/w14/registratio...
User Registration
Full name :
B.Durga Prasad
Username :
durgab
Password :
Register
For Login : Click Here

EXPERIMENT – 6(ix)

PROBLEM STATEMENT: A web application that lists all cookies stored in the browser onclicking "List Cookies" button.

AIM: A web application to list all cookies stored in the browser.

PROGRAM:

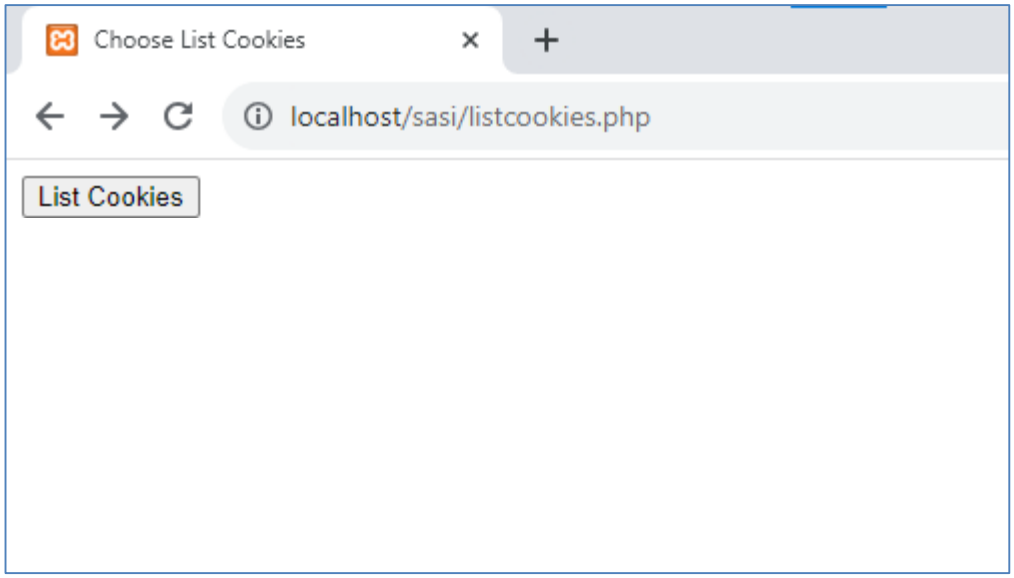
Listcookies.php

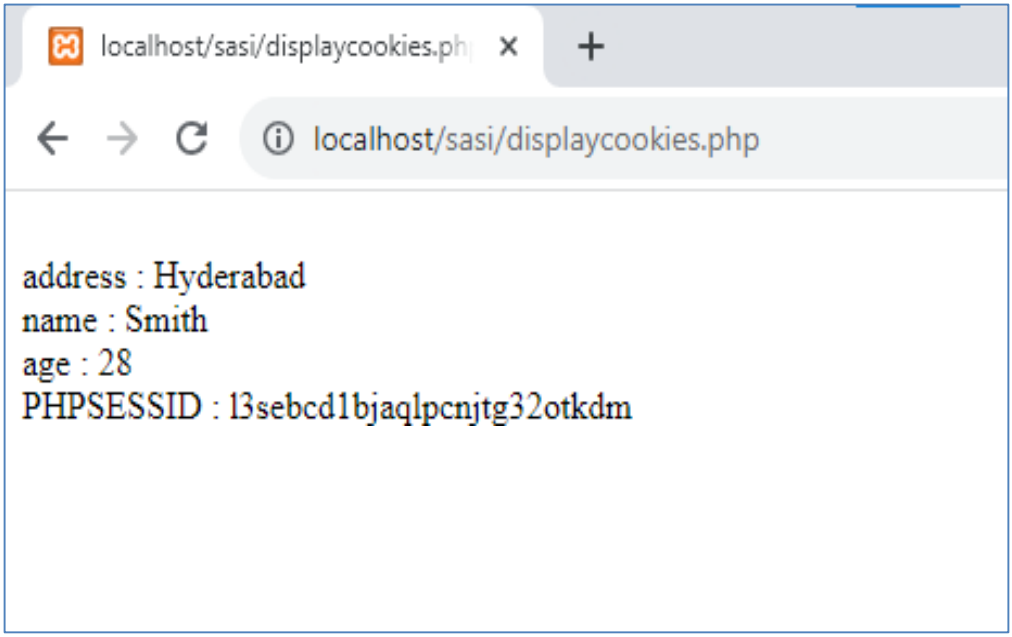
```
<html>
<head>
<title> Choose List Cookies </title>
</head>
<body>
<form action="displaycookies.php" method="POST"/>
<input type="submit" name="submit" value="List Cookies"/>
</form>
<?php setcookie("name","Smit h");
setCookie("age","28");  setCookie("address","H
yderabad");
?>
</body>
</html>
```

displaycookies.php

```
<?php
$cookie=$_COOKIE; foreach ($cookie as
$key=>$val)echo "<br>$key : $val";
?>
```

OUTPUT:


Choose List Cookies
localhost/sasi/listcookies.php
List Cookies


localhost/sasi/displaycookies.ph
localhost/sasi/displaycookies.php
address : Hyderabad
name : Smith
age : 28
PHPSESSID : 13sebcd1bjaq1pcnjtg32otkdm