



Web Internet Programming Laboratory Manual

**Department of
Information Science
and Engineering**

Course Code : 20ISL56A

Semester : V

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New Horizon College of Engineering

VISION

To achieve total quality in education and excellent knowledge management through specific, measurable, attainable relevant, time- bound goals and continuous improvement methods.

MISSION

To mould our students into a holistic personality accomplished in emotional, moral, intellectual, social and mental capabilities, besides inculcating a capacity for critical and lateral thinking.

Department of Information Science & Engineering

VISION

To evolve as a centre of academic excellence and advanced research in information science and engineering discipline and to endeavour the computational competence of students for their dream career achievement and enhancing the managerial and technical skills.

MISSION

To inculcate students with profound understanding of fundamentals related to discipline, attitudes, skills and their application in solving real world problems, with an inclination towards societal issues and research.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: To excel in their professional career with expertise in providing solutions to Information Technology problems.

PEO2: To pursue higher studies with profound knowledge enriched with academia and industrial skill sets.

PEO3: To exhibit adaptive and agile skills in the core area of Information Science & Engineering to meet the technical and managerial challenges.

PEO4: To demonstrate interpersonal skills, professional ethics to work in a team to make a positive impact on society.

- 1.) **Design a personal web page using HTML5 which should include:** a.) A brief description about yourself. b.) A small quote describing you. c.) Your photo as the profile picture using canvas d.) An index which should be a list of different headings/sections present in a document in the form of link which when clicked takes you to that heading/section The different sections: • Your educational details(Has to be displayed using a table) • Your hobbies/interests with small description about that particular hobby. • Your Achievements. Apply styles to the web page using CSS.

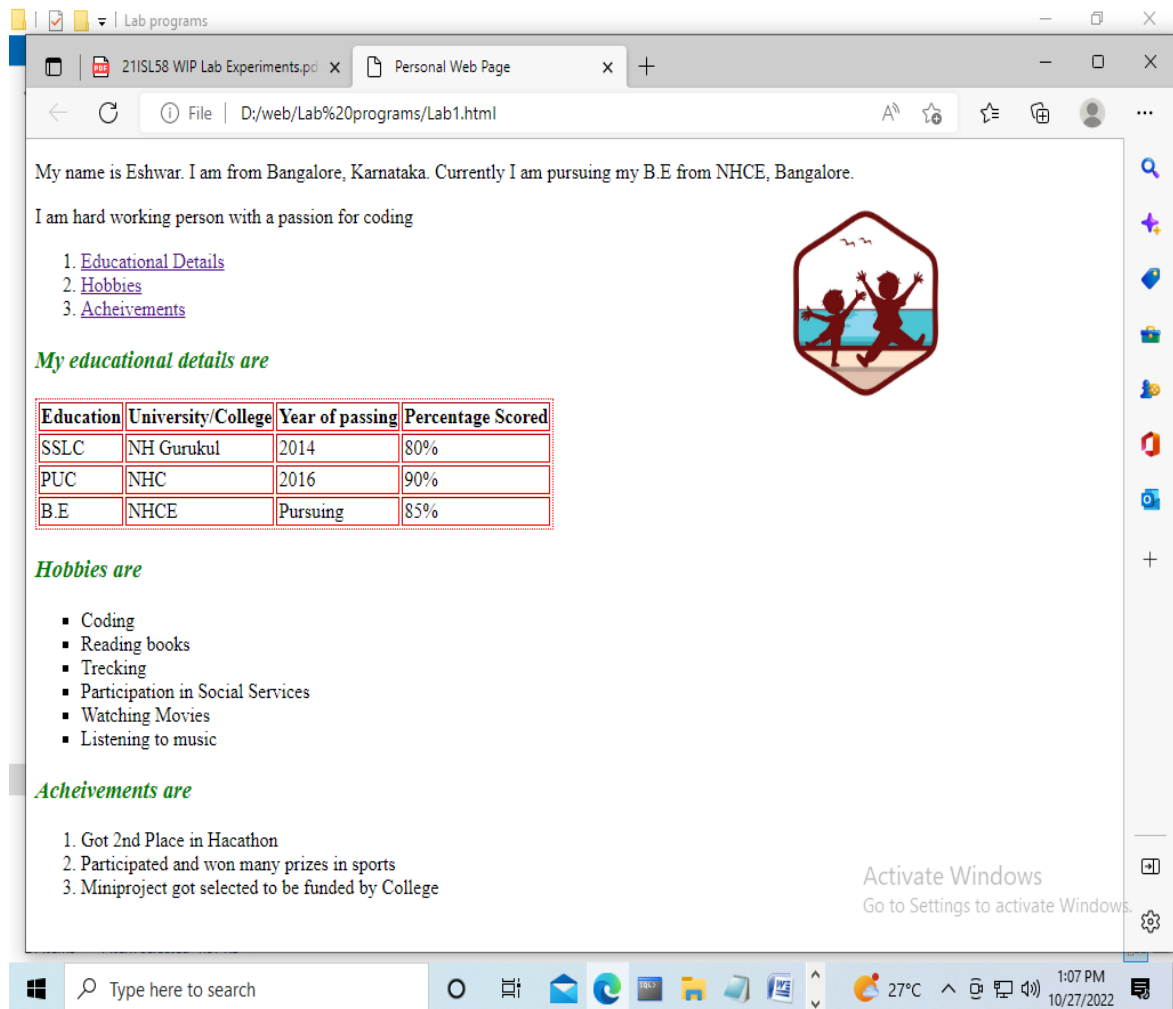
```
<!DOCTYPE html>
<html>
<head><title>Personal Web Page</title>
<style type="text/css">
body{ width:800px;}
table{ border-style:dotted;
border-color:red;}
ul{list-style-type: square}
h3{ font-style:italic;color:green;}
img{ float:right;}
</style>
</head>
<body>
<p>My name is Eshwar. I am from Bangalore, Karnataka. Currently I am pursuing my
B.E from NHCE, Bangalore.</p>

<p>I am hard working person with a passion for coding</p>
<ol>
<li><a href="#edu">Educational Details</a></li>
<li><a href="#hob">Hobbies</a></li>
<li><a href="#acheivements">Acheivements</a></li>
</ol>
<article>
<section id="edu">
<h3>My educational details are</h3>
<table border="1">
<tr>
<th>Education</th>
<th>University/College</th>
<th>Year of passing</th>
<th>Percentage Scored</th>
```

```
</tr>
<tr>
<td>SSLC</td>
<td>NH Gurukul</td>
<td>2014</td>
<td>80%</td>
</tr>
<tr>
<td>PUC</td>
<td>NHC</td>
<td>2016</td>
<td>90%</td>
</tr>
<tr>
<td>B.E</td>
<td>NHCE</td>
<td>Pursuing</td>
<td>85%</td>
</tr>
</table>
</section>
<section id="hob">
<h3>Hobbies are</h3>
<ul>
<li>Coding</li>
<li>Reading books</li>
<li>Trecking</li>
<li>Participation in Social Services</li>
<li>Watching Movies</li>
<li>Listening to music</li>
</ul>
</section>
<section id="acheivements">
<h3>Acheivements are</h3>
<ol>
<li>Got 2nd Place in Hacathon</li>
<li>Participated and won many prizes in sports</li>
<li>Miniproject got selected to be funded by College</li>
</ol>
</section>
</article>
```

</body>

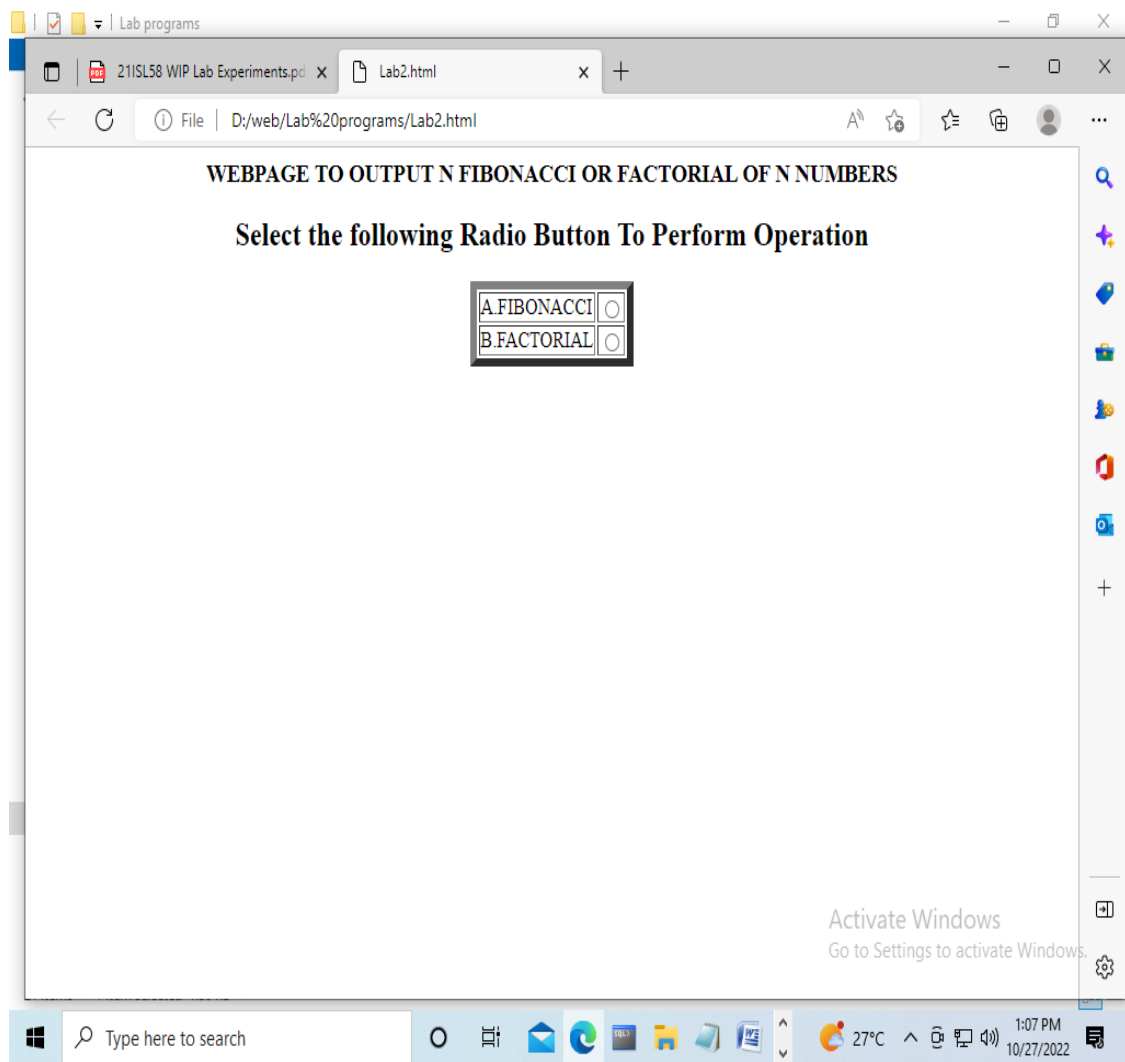
</html>



- 2.) Using Linux platform with Apache, develop and demonstrate a XHTML file that includes Javascript script for the following problem: a) Input: A number n obtained using prompt Output: The first n Fibonacci numbers b) input : A number output : factorial of the number**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD/XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml10/DTD/xhtml10.dtd">
<html>
<head>
<script type="text/javascript">
function fibonacci()
{
var n=prompt("Enter a number");
if(n==n.match(/[0-9]*/))
{
var a=0;
var b=1;
if(n==0)
document.write("No such series");
document.write("<b>FIBONACCI SERIES:<br/></b>");
if(n==1)
document.write(a+"<br/>");
else
{
document.write(a+"<br/>");
document.write(b+"<br/>");
for(var i=2;i<n;i++)
{
var fib=a+b;
a=b;
b=fib;
document.write(fib+"<br />");
}
}
}
else
alert("Invalid Input");
}
function factorial()
{
var n=prompt("Enter a number");
```

```
if(n==n.match(/[0-9]*/))
{
document.write("<h3> factorial </h3>");
document.write("<table border='1' width='50%'>");
document.write("<tr><th>Factorial (n)</th></tr>" );
var fact=1;
for(i=1;i<=n;i++)
{
var fact = fact*i
}
document.write( "<tr><td>" + fact + "</td></tr>" );
document.write( "</table>" );
}
else
alert("Invalid Input");
} </script>
</head>
<body>
<h3>
<center>WEBPAGE TO OUTPUT N FIBONACCI OR FACTORIAL OF N
NUMBERS </center>
</h3>
<h2>
<center> Select the following Radio Button To Perform Operation
</center>
</h2>
<table border="6" align="center">
<tr>
<td>A.FIBONACCI</td>
<td><input type="radio" name="a" onclick ="fibonacci()"/></td>
</tr>
<tr>
<td>B.FACTORIAL</td>
<td><input type="radio" name="a" onclick ="factorial()"/></td>
</tr>
</table>
</body>
</html>
```



- 3.) Design and develop a XHTML document that includes JavaScript script to create stack of images such that images appear one top on another with images slightly visible. Whenever cursor is placed on an image that image should be completely visible and on moving cursor out image should go back to original position.**

```
<html>
<head>
<title> Program 3b </title>
<script type="text/javascript">
//var top1="p1";
var newtop;
function totop(newtop)
{
//domTop=document.getElementById(top1).style;
domNew=document.getElementById(newtop).style;
//domTop.zIndex="0";
domNew.zIndex="10";
//top=newtop;
}
function toOriginal()
{
document.getElementById("p1").style.zIndex=0;
document.getElementById("p2").style.zIndex=0;
document.getElementById("p3").style.zIndex=0;
}
</script>
<style type="text/css">
.paral{
position:absolute;
top:0;
left:0;
Z-index:0;
color:blue;
border-style:solid;
background-color:ivory;
}
.paral2{
position:absolute;
top:25px;
left:50px;
Z-index:0;
color:red;
```

```
border-style:solid;
background-color:ivory;
}
.para3{
position:absolute;
top:50px;
left:90px;
Z-index:0;
border-style:solid;
background-color:ivory;
}
</style>
</head>
<body>



</body>
</html>
```



- 4.) Develop and demonstrate, using Javascript, a XHTML document that collects the USN (the valid format is: A digit from 1 to 4 followed by two upper-case characters followed by two digits followed by two upper-case characters followed by three digits; no embedded spaces allowed) and semester (valid format digit from 1 to 8) of the user. Event handler must be included for the form element that collects this information to validate the input. Messages in the alert windows must be produced when errors are detected.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head> <title> SCRIPT VALIDATION</title> </head>
  <body>
    <h1>USN and SEMESTER validation</h1>
    <script type="text/javascript">
      function validate(usn,sem)
      {
        var pattern=/^[1-4][A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{3}$/;

        var error="";
        if (!usn.value.match(pattern))
        {
          error = "USN is invalid!";
        }

        var pattern=/^[1-8]$/;
        if (!sem.value.match(pattern))
        {
          error = error + "SEMESTER is ivalid!";
        }

        if (error.length == 0)
          alert("The USN and SEMESTER are valid!");
        else
          alert(error);
      }
    </script>
    <form>
      USN: <input type="text" id="usn"/> SEMESTER: <input type="text" id="sem"/>
      <input type="submit" value="SUBMIT" onclick="validate(usn,sem)"/>
    </form>
```

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

USN and SEMESTER validation

USN: SEMESTER:

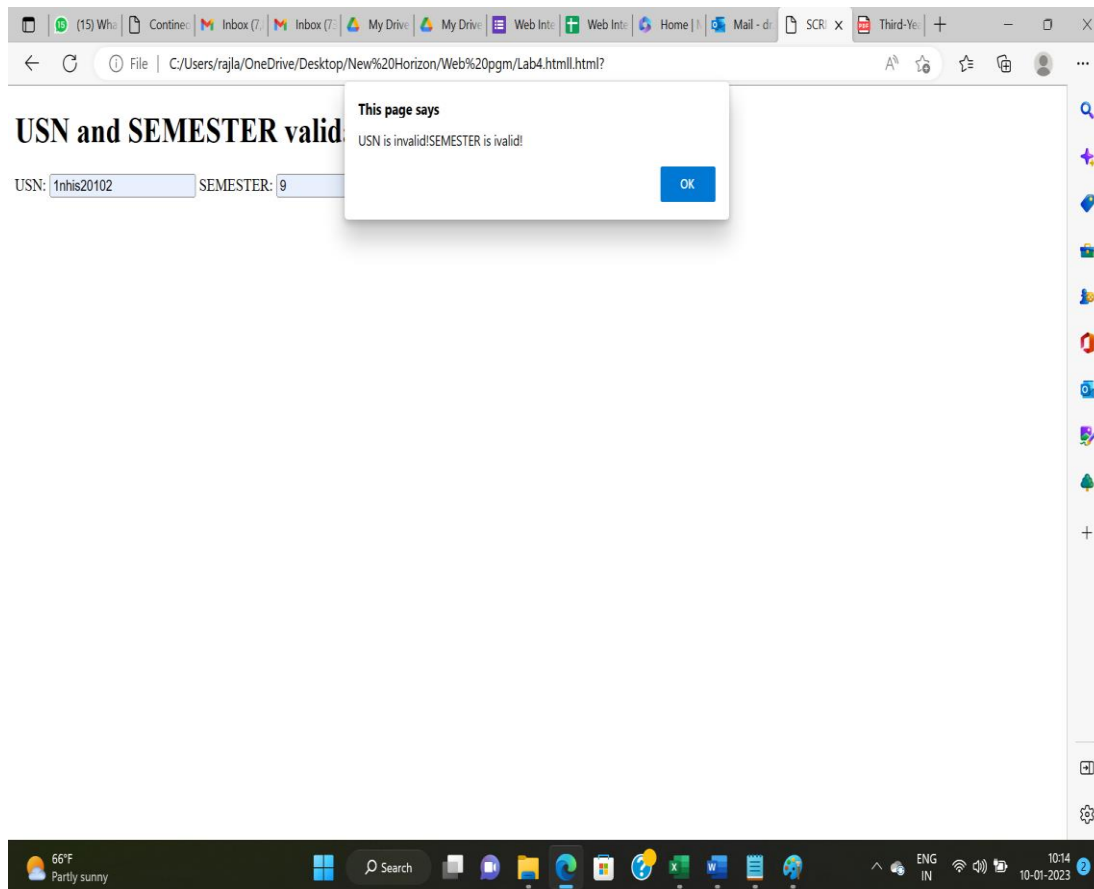
USN and SEMESTER valid

USN: SEMESTER:

This page says

The USN and SEMESTER are valid!

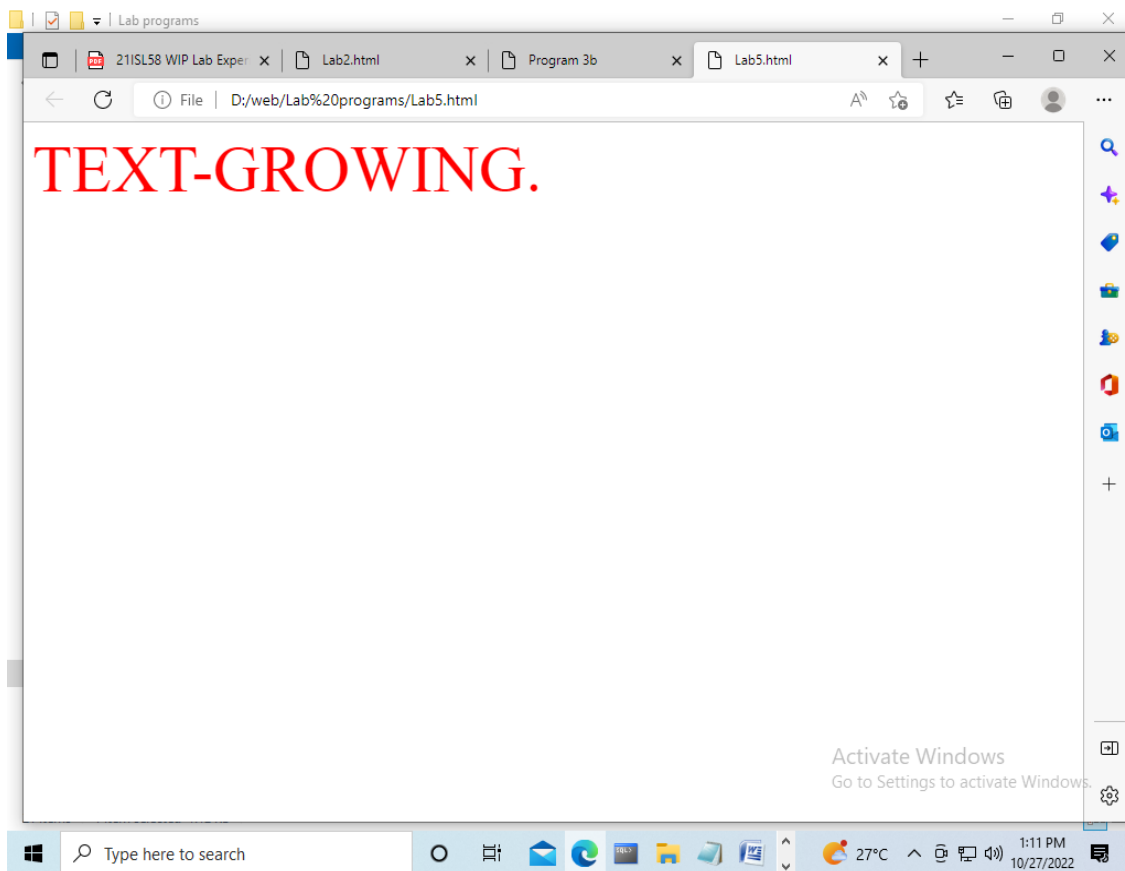
OK

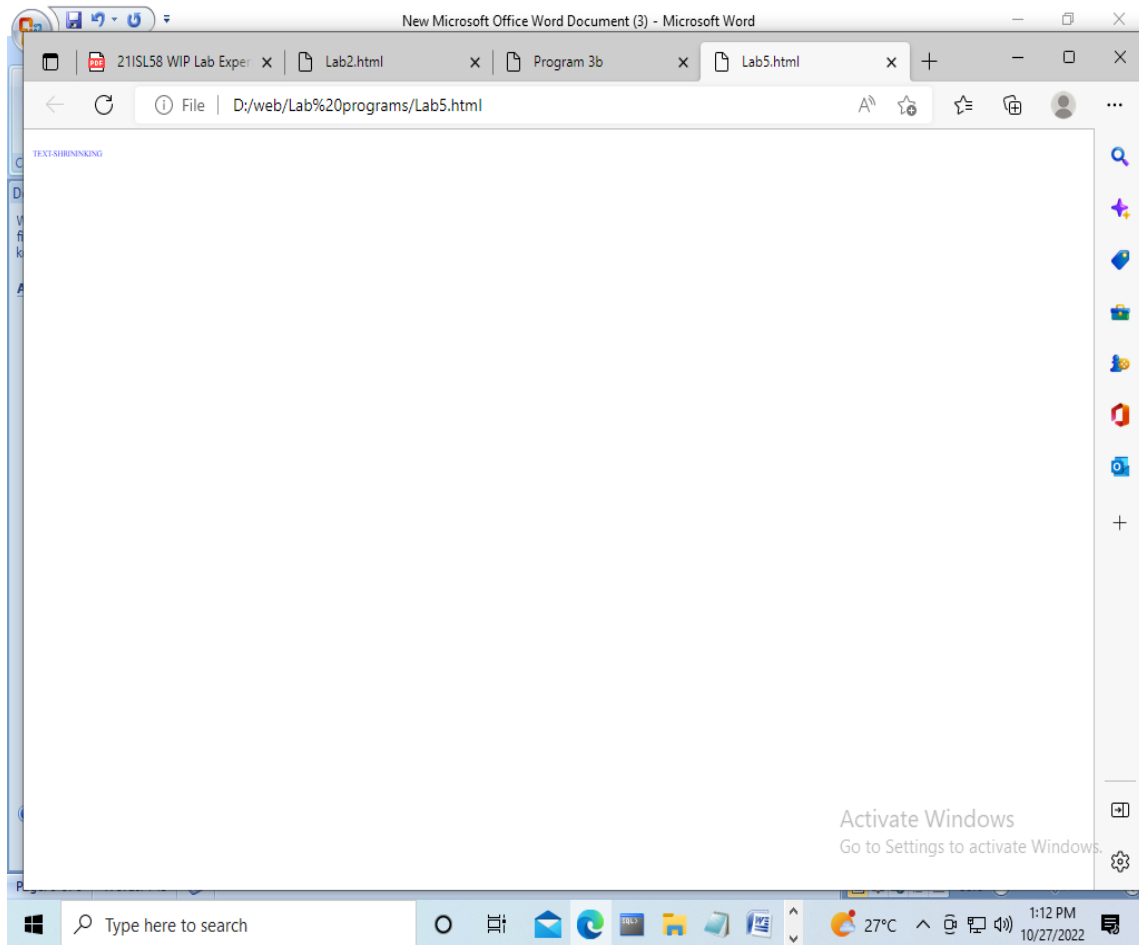


- 5.) **Develop and demonstrate, using Javascript, a XHTML document that displays text “TEXT-GROWING” with increasing font size in the interval of 100ms in RED COLOR, when the font size reaches 50pt it displays “TEXT-SHRINKING” in BLUE color. Then the font size decreases to 5pt.**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD/XHTML 1.0 Transitional//EN"
http://www.w3.org/TR/xhtml10/DTD/xhtml10.dtd">
<html>
<body>
<p id="myP1">TEXT-GROWING.</p>
<p id="myP2">TEXT-SHRINKING</p>
</body>
<script>
//Global declarations
var size = 10;
var myWait1 = setInterval(GrowText1, 100);
function GrowText1()
{
if(size<51)
{
size = size + 1;
document.getElementById("myP1").style.fontSize = (size+'pt');
document.getElementById("myP1").style.color = "red";
//Hide the paragraph "text-shrinkning"
document.getElementById("myP2").style.visibility = "hidden";
}
else
{
clearInterval(myWait1);
myWait1 = setInterval(ShrinkText1, 100);
//Now hide the 1st paragraph and display the second paragraph
document.getElementById("myP1").style.visibility = "hidden";
document.getElementById("myP1").style.fontSize = '1pt';
document.getElementById("myP2").style.visibility = "visible";
}
}
function ShrinkText1()
{
if(size>5)
{
size = size - 1;
```

```
document.getElementById("myP2").style.fontSize = (size+'pt');  
document.getElementById("myP2").style.color = "blue";  
}  
else  
{  
clearInterval(myWait1);  
}  
}  
</script>  
</html>
```





6. Design a web page using XHTML and PHP to process the data from a student marks card form. Student marks card form must collect the student name, USN and marks of any 3 subjects. The CGI program must compute the total marks, grade and the data must be sent back to the user as another XHTML document to display. Table for calculating the grade is given below:

Marks in Percentage Grade

>=90----- A

>=80 -----B

>=60 ----C

>=40 ---D

```
<!DOCTYPE html>
```

```
<html>
```

```
<head><title>Student Results</title>
```

```
</head>
```

```
<body>
```

```
<form action="http://localhost:2123/TEST/student.php" method="post">
```

Enter Details of student

Name:<input type="text" name="NAME"/>

USN:<input type="text" name="USN"/>

Enter Marks for the below subjects:

Web Internet Programming:<input type="text" name="WIP"/>

Computer Networks:<input type="text" name="CN"/>

Data Warehousing and Data Mining:<input type="text" name="DWDM"/>


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

```
<input type="reset" value="reset"/><br/>
```

```
</form>
```

```
</body>

</html>

<?php

$name=$_POST['NAME'];

$usn=$_POST['USN'];

$wip=$_POST['WIP'];

$cn=$_POST['CN'];

$dwdm=$_POST['DWDm'];

$Total_Marks=$wip+$cn+$dwdm;

$Avg_Marks = ($Total_Marks)/3;

if($wip>=40 && $cn>=40 && $dwdm>=40){

if($Avg_Marks >=90){

Print "<html><i>Student $name With USN $usn has scored A Grade</i>";}

else if($Avg_Marks >=80 && $Avg_Marks <90){

Print "<html><i>Student $name With USN $usn has scored B Grade</i>";}

else if($Avg_Marks >=60 && $Avg_Marks <80){

Print "<html><i>Student $name With USN $usn has scored C Grade</i>";}

else if($Avg_Marks >=40 && $Avg_Marks <60){

Print "<html><i>Student $name With USN $usn has scored D Grade</i>";}

}

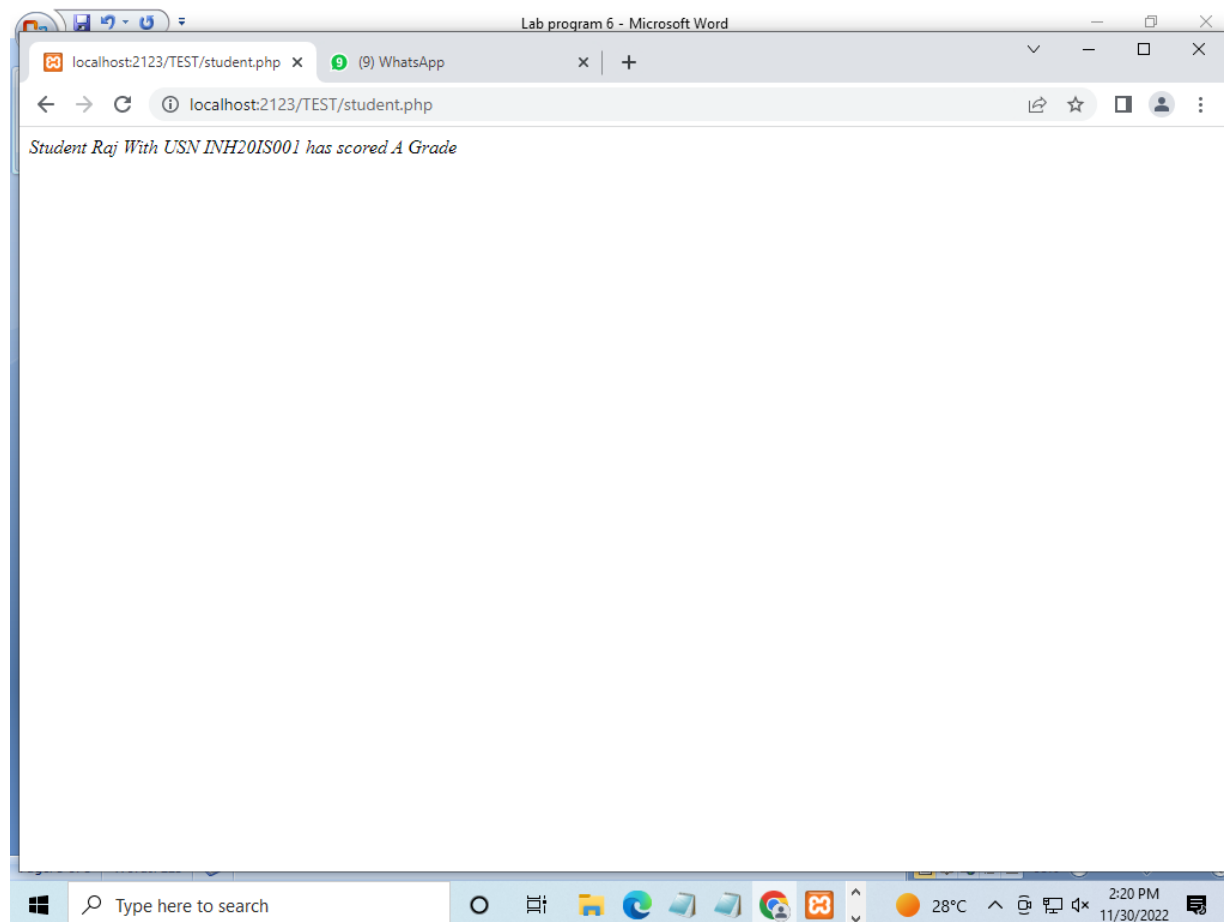
else{

Print "<html><i>Student $name With USN $usn has scored F Grade</i>";}

Print "</html>";

?>
```

Enter Details of student Name:
USN:
Enter Marks for the below subjects: Web Internet Programming:
Computer Networks:
Data Warehousing and Data Mining:



7.) Design a web page using XHTML and PHP to insert emp_id, emp_name and experience information entered by the user into a table created using MySQL and to display the current contents of this table. Also retrieve the details of the employee based on the emp_id as specified by the user

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Insertion of Employee information to Database</title>
```

```
</head>
```

```
<body>
```

```
<i style="color:red;font-size:20pt">Enter the following information to be inserted into  
Database</i>
```

```
<form action="http://localhost:2123/TEST/lab7.php" method="post">
```

```
Enter Name:<input type="text" name="name"/><br />
```

```
Enter employee id:<input type="text" name="emp_id"/><br />
```

```
Enter experience:<input type="text" name="exp"/><br />
```

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

```
<input type="reset" value="reset"/>
```

```
</form>
```

```
</body>
```

</html>

insert.php

<html>

<head>

</head>

<body>

<?php

\$name=\$_POST['name'];

\$emp_id=\$_POST['emp_id'];

\$exp=\$_POST['exp'];

\$con=mysqli_connect("localhost","root","");

if(!(\$con))

{

die('error in connecting to DB');

}

else

{

**print "<i style='color:green'>connection successfull</i>
";**

}

\$db=mysqli_select_db(\$con,"userinfo");

\$query="insert into user_detail values('\$name',\$emp_id,\$exp)";

mysqli_query(\$con,\$query);

\$result=mysqli_query(\$con,"select * from user_detail");

\$rows=mysqli_num_rows(\$result);

```
echo "<i style='color:blue'>num of rows inserted into the user_detail table are  
$rows</i>";  
  
echo "<table border='1'><tr><th>Name</th><th>emp_id</th><th>exp</th></tr>";  
for($row=1;$row<=$rows;$row++)  
{  
  
$rowv=mysqli_fetch_array($result,MYSQLI_ASSOC);  
echo "<tr><td>".$rowv['name'].</td>";  
echo "<td>".$rowv['emp_id'].</td></tr>";  
echo "<td>".$rowv['exp'].</td></tr>";  
}  
  
echo "</table>";  
mysqli_close($con);  
?>  
  
<h4>Enter user name to be searched</h4>  
  
<form action="http://localhost:2123/TEST/search.php" method="post">  
Enter employee id to be searched:<input type="text" name="emp_id"/>  
<input type="submit" value="Search"/>  
<input type="reset" value="reset"/>  
</form>  
  
</body>  
  
</html>
```

Search.php

```
<html>
```

```
<head>

</head>

<body>

<?php

$name=$_POST['emp_id'];

$con=mysqli_connect("localhost","root","");

if(!$con)

{

    die("error in connecting to DB");

}

else

{

    print "<i style='color:green'>connection successfull</i><br />";

}

$db=mysqli_select_db($con,"userinfo");

$result=mysqli_query($con,"select * from user_detail where emp_id='$name'");

$rows=mysqli_num_rows($result);

if($rows==0)

{

    echo "<i style='color:red;'>There are no rows with the name as $name</i>";

}

else

{
```



```
echo "<i style='color:blue'>num of rows in the user_detail table with user name as  
$name are $rows</i><br />";  
  
echo "<table border='1'><tr><th>Name</th><th>emp_id</th><th>exp</th></tr>";  
for($row=1;$row<=$rows;$row++)  
{  
$rowv=mysqli_fetch_array($result,MYSQLI_ASSOC);  
echo "<tr><td>".$rowv['name'].</td>";  
echo "<td>".$rowv['emp_id'].</td></tr>";  
  
echo "<td>".$rowv['exp'].</td></tr>";  
}  
echo "</table>";  
  
}  
mysqli_close($con);  
?>  
  
</form>  
  
</body>  
  
</html>
```

A screenshot of a web browser window displaying a form titled "Enter the following information to be inserted into Database". The form contains three input fields: "Enter Name:", "Enter employee id:", and "Enter experience:". Below these fields are two buttons: "submit details" and "reset". The browser's address bar shows the file path "file:///C:/xampp/htdocs/TEST/Emp.html". The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with a temperature of 26°C and time of 3:47 PM on 12/7/2022.

Enter the following information to be inserted into Database

Enter Name:

Enter employee id:

Enter experience:

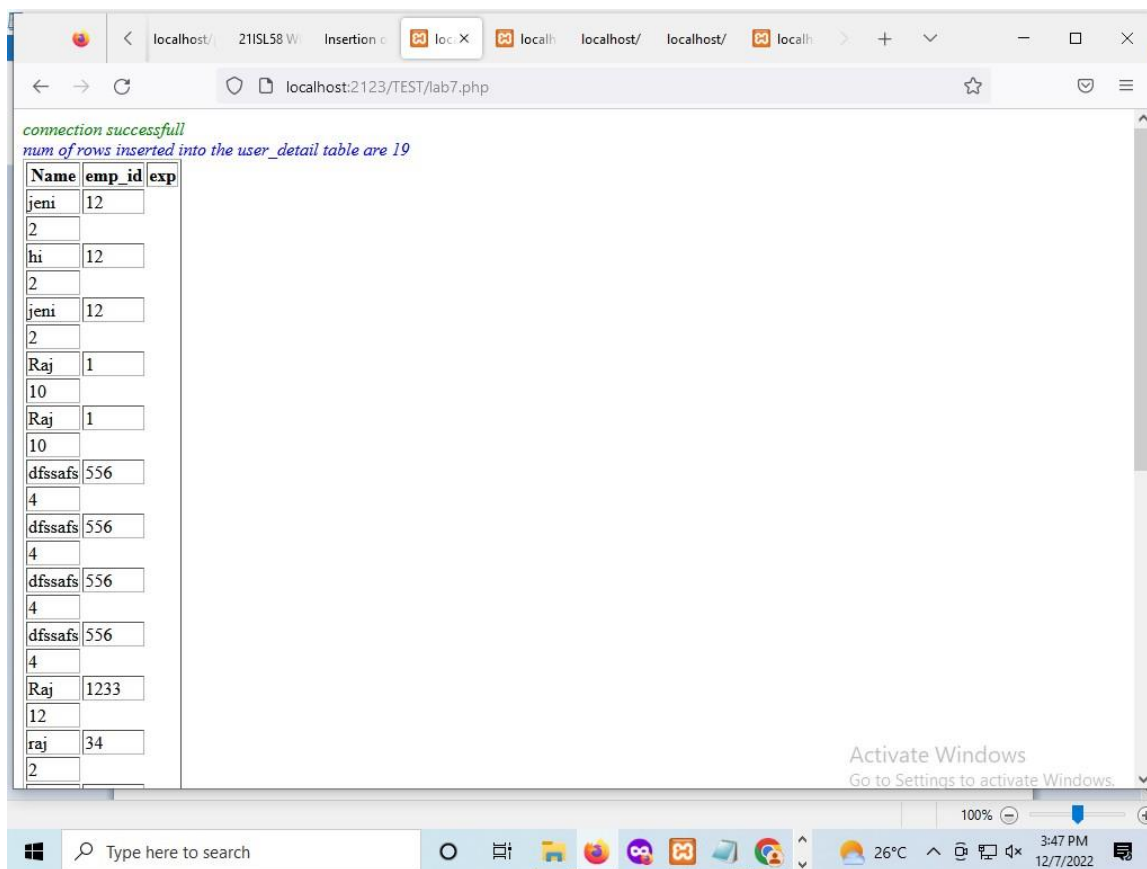
A second screenshot of the same web browser window, but now the form fields are populated with data. The "Enter Name:" field contains "raj", the "Enter employee id:" field contains "456", and the "Enter experience:" field contains "4". The "submit details" and "reset" buttons remain visible. The browser window and Windows taskbar are identical to the first screenshot.

Enter the following information to be inserted into Database

Enter Name:

Enter employee id:

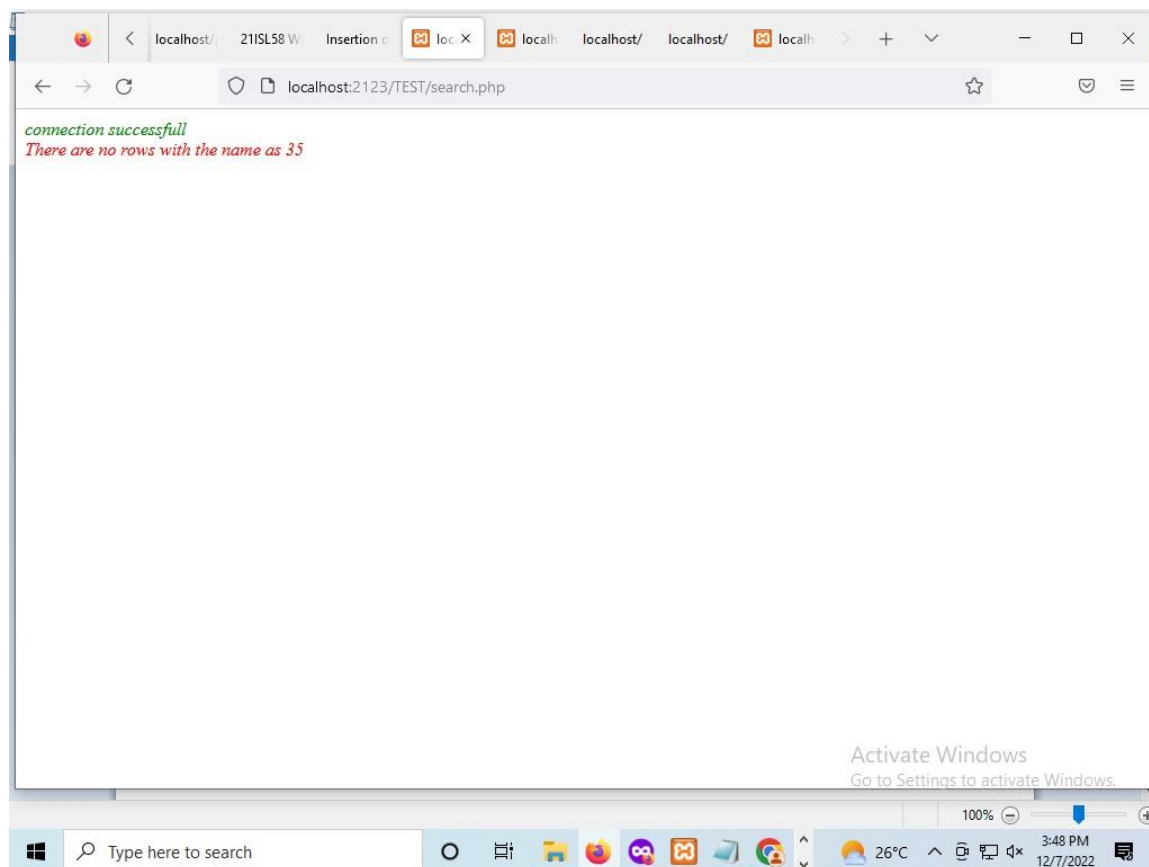
Enter experience:



connection successfull
num of rows inserted into the user_detail table are 19

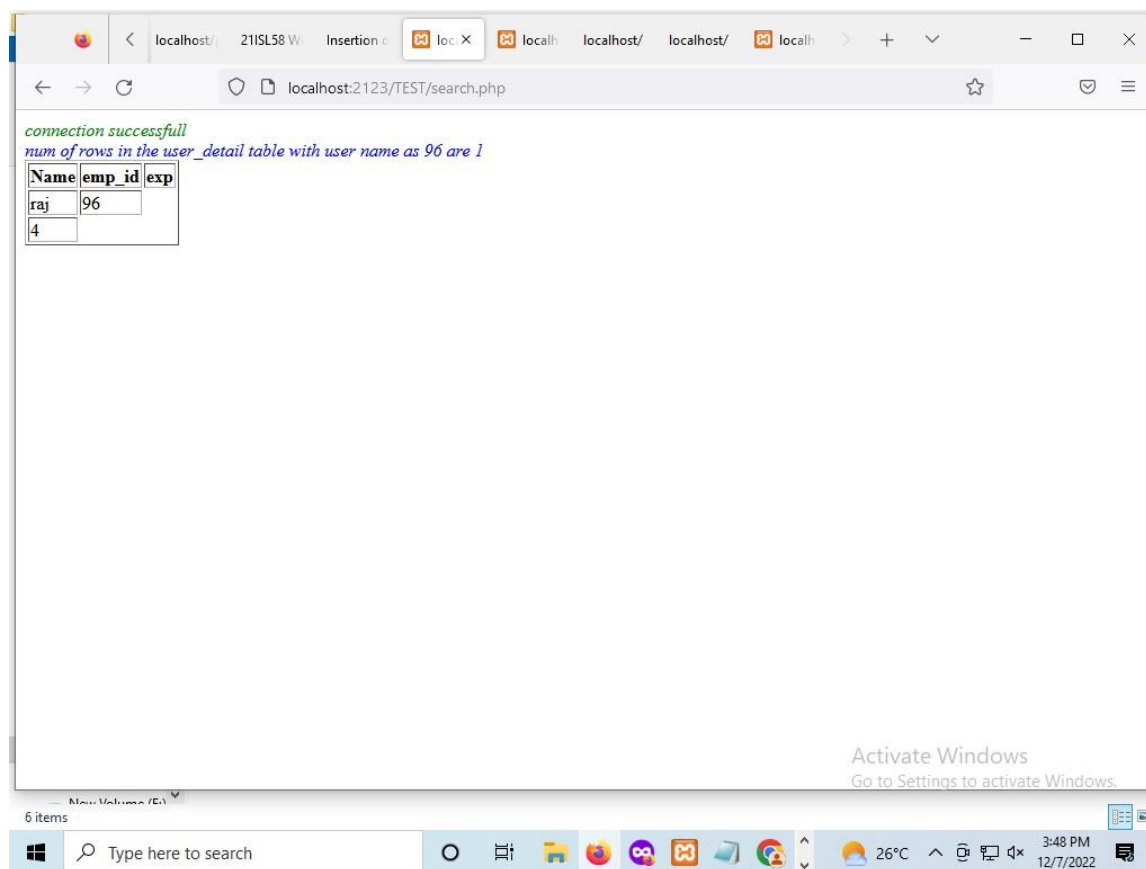
Name	emp_id	exp
jeni	12	
2		
hi	12	
2		
jeni	12	
2		
Raj	1	
10		
Raj	1	
10		
dfssafs	556	
4		
dfssafs	556	
4		
dfssafs	556	
4		
dfssafs	556	
4		
Raj	1233	
12		
raj	34	
2		

Activate Windows
Go to Settings to activate Windows.



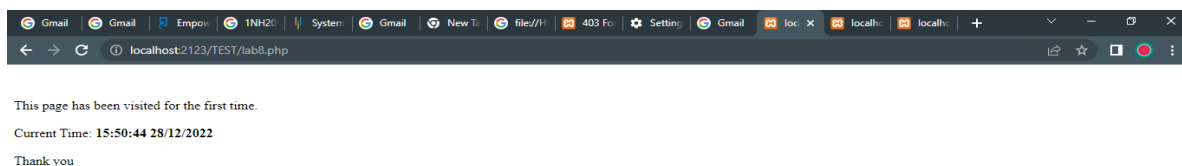
connection successfull
There are no rows with the name as 35

Activate Windows
Go to Settings to activate Windows.



8) Design a web page using XHTML and PHP to store current date-time in a COOKIE and display the 'Last visited on' date-time on the web page upon reopening of the same page.

```
<?php
date_default_timezone_set("Asia/Calcutta");
$current_time          =          date("H:i:s          d/m/Y");
$time_to_expire        =          time()          +          60*60;
setcookie("Last_Accessed",$current_time,$time_to_expire);
if(isset($_COOKIE["Last_Accessed"]))
{
    $last_visit          =          $_COOKIE["Last_Accessed"];
    print          "<br><br>Last          Accessed          :          $last_visit";
}
else
{
    print          "<br><br>This          page          has          been          visited          for          the          first          time.";
}
print          "<br><br>Current          Time:          <b>$current_time</b>";
print          "<br><br>Thank          you";
?>
```



9) Design an XML document with DTD specification to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, Name of the College, Branch, Year of Joining, and e-mail id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the document.

Ex9new.xml

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

<?xml-stylesheet type="text/css" href="vtu1.css" ?>

<!DOCTYPE VTU SYSTEM "vtu1.dtd">

<VTU>

    <STUDENT>

        <USN>1NH20IS001</USN>

        <NAME>Ajith </NAME>

        <COLLEGE>NHCE</COLLEGE>

        <BRANCH>Ise</BRANCH>

        <YOJ>2020</YOJ>

        <EMAIL>Ajith@gmail.com</EMAIL>

    </STUDENT>

    <STUDENT>

        <USN>1NH21CS002</USN>

        <NAME>Biju</NAME>

        <COLLEGE>NHCE</COLLEGE>

        <BRANCH>Cse</BRANCH>

        <YOJ>2021</YOJ>

        <EMAIL>Biju@gmail.com</EMAIL>

    </STUDENT>
```

```
<STUDENT>
    <USN>1NH19EC003</USN>
    <NAME>Cintu</NAME>
    <COLLEGE>NHCE</COLLEGE>
    <BRANCH>Ece</BRANCH>
    <YOJ>2019</YOJ>
    <EMAIL>cintu@gmail.com</EMAIL>
</STUDENT>
</VTU>
```

VTU1.css

```
@charset "ISO-8859-1";
```

USN

```
{
    color:magenta;font-family:verdana;font-size:20pt;
}
```

NAME

```
{
    color:blue;font-family:verdana;font-size:20pt;
}
```

COLLEGE

```
{
    color:black;font-family:verdana;font-size:20pt;
}
```

BRANCH

```
{  
    color:maroon;font-family:verdana;font-size:20pt;  
}
```

YOJ

```
{  
    color:purple;font-family:verdana;font-size:20pt;  
}
```

EMAIL

```
{  
    color:green;font-family:verdana;font-size:20pt;  
}
```

STUDENT

```
{  
    display:block;margin-top:30px;border-style:solid;  
}
```

1NH20IS001 Ajith NHCE Ise 2020 Ajith@gmail.com
--

1NH21CS002 Biju NHCE Cse 2021 Biju@gmail.com
--

1NH19EC003 Cintu NHCE Ece 2019 cintu@gmail.com
--

10) Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, Name of the College, Branch, Year of Joining, and e-mail id. Make up sample data for 2 students. Display the details using XSLT

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

Ex10new.xml

```
<?xml-stylesheet type="text/xsl" href="ex10stu.xsl" ?>
```

```
<VTU>
```

```
  <STUDENT>
```

```
    <USN>1NH19IS001</USN>
```

```
    <NAME>Akash</NAME>
```

```
    <COLLEGE>NHCE</COLLEGE>
```

```
    <BRANCH>ISE</BRANCH>
```

```
    <YOJ>2019</YOJ>
```

```
    <EMAIL>akash@gmail.com</EMAIL>
```

```
  </STUDENT>
```

```
  <STUDENT>
```

```
    <USN>1NH19CS002</USN>
```

```
    <NAME>Bindu</NAME>
```

```
    <COLLEGE>NHCE</COLLEGE>
```

```
    <BRANCH>CSE</BRANCH>
```

```
    <YOJ>2019</YOJ>
```

```
    <EMAIL>bindu@gmail.com</EMAIL>
```

```
  </STUDENT>
```

```
</STUDENT>
```

```
<USN>1NH17IS003</USN>

<NAME>Dheeraj</NAME>

<COLLEGE>NHCE</COLLEGE>

<BRANCH>ISE</BRANCH>

<YOJ>2017</YOJ>

<EMAIL>dheeraj@gmail.com</EMAIL>

</STUDENT>

</VTU>
```

Ex10Stu.xsl

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
<xsl:template match="/">
<html>
<body style="background-color:pink">
<center>
<h2>STUDENT INFORMATION:</h2>
</center>
<table border="3" align="center">
<tr style="background-color:teal;color:white;">
<th>USN</th>
<th>NAME</th>
<th>COLLEGE</th>
<th>BRANCH</th>
<th>YEAR OF JOINING</th>
<th>EMAIL</th>
</tr>
<xsl:for-each select="VTU/STUDENT[USN='1NH19CS002']">
<tr>
<td>
<xsl:value-of select="USN"/>
</td>
<td>
<xsl:value-of select="NAME"/>
</td>
<td>
<xsl:value-of select="COLLEGE"/>
</td>
```

```

<td>
<xsl:value-of select="BRANCH"/>
</td>
<td>
<xsl:value-of select="YOJ"/>
</td>
<td>
<xsl:value-of select="EMAIL"/>
</td>
</tr>
</xsl:for-each>
</table>
</body>
</html>
</xsl:template>
</xsl:stylesheet>

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

```

```

<!ELEMENT VTU (STUDENT+)>

<!ELEMENT STUDENT (USN,NAME,COLLEGE,BRANCH,YOJ,EMAIL)>

<!ELEMENT USN (#PCDATA)>

<!ELEMENT NAME (#PCDATA)>

<!ELEMENT COLLEGE (#PCDATA)>

<!ELEMENT BRANCH (#PCDATA)>

<!ELEMENT YOJ (#PCDATA)>

<!ELEMENT EMAIL (#PCDATA) >

```

```

<!ENTITY Ise "Information Science and Engineering">

<!ENTITY Cse "Computer Science and Engineering">

<!ENTITY Ece "Electronics and Communication Engineering">

<!ENTITY NHCE "New Horizon College of Engineering,Bengaluru">

```

1NH20IS001 Ajith NHCE Ise 2020 Ajith@gmail.com
1NH21CS002 Biju NHCE Cse 2021 Biju@gmail.com
1NH19EC003 Cintu NHCE Ece 2019 cintu@gmail.com