Sl.No **Experiments**

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

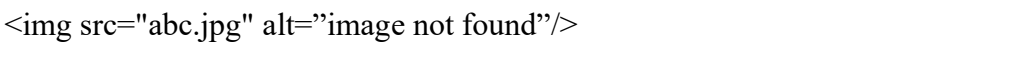
The different sections:

- **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:100px;}

table{border-style:dotted;

border-color:red;}

ul{list-style-type: square}

h3{font-style:italic;color:green;}

img{float:right;}

</style>

</head>

<body>
```

My name is Eshwar. I am from Bangalore, Karnataka. Currently I am pursuing my B.E from NHCE, Bangalore.



I am hard working person with a passion for coding

Educational Details

Hobbies

Acheivements

<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>

</secton>


<section id="hob">

<h3>Hobbies are</h3>

<ul>

<li>Coding</li>

<li>Reading books</li>
```

Trecking

Participation in Social Services

Watching Movies

Listening to music

</section>

<section id="acheivements">

<h3>Acheivements are</h3>

Got 2nd Place in Hacathon

Participated and won many prizes in sports

Miniproject got selected to be funded by College

</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("Inavlid 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">
.para1{
      position:absolute;
      top:0;
      left:0;
      Z-index:0;
      color:blue;
      border-style:solid;
      background-color:ivory;
     }
.para2{
      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>
<img src="Photo.jpg" height="50%" width="50%" class="para1" id="p1" onmouseover="totop('p1')" onmouseout="toOriginal()" />

<img src="Photo.jpg" height="50%" width="50%" class="para2" id="p2" onmouseover="totop('p2')" onmouseout="toOriginal()" />

<img src="Photo.jpg" height="50%" width="50%" class="para3" id="p3" onmouseover="totop('p3')" onmouseout="toOriginal()" />

</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.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD/XHTML 1.0 Transitional//EN" http://www.w3.org/TR/xhtml10/DTD/xhtml10.dtd">

<html>
 <head>
  <title> University Seat Number and Sem Validation</title>
```

```
<script type="text/javascript">
        function validate()
         {
           var usn=document.getElementById("txtusn");
           var sem=document.getElementById("txtnum");
           if(usn.value==usn.value.match(/[1-4][A-Z]{2}[0-9]{2}
[A-Z]{2}(?!0{3})[0-9]{3}/))                {
                 if(sem.value==sem.value.match(/[1-8]/))
                   alert("Entered USN  & SEM is valid");
                else
                  {
                   alert("Entered sem is invalid");
                   sem.focus();
                   return false;     }
              }
            else
             {
               alert("Enter valid USN");
               usn.focus();
               return false;    }
         }
 </script>
  </head>
   <body >
    <h1><center>Form to validate USN and Sem</center></h1>
    <form onsubmit="return validate()">
     <table border="1" align="center">
          <tr>
            <th>Enter university seat number </th>
            <td> <input type="text" id="txtusn" maxlength="10"/></td>
          </tr>
          <tr>
            <th>Enter a semester number</th>
```

```
            <td><input type="text" id="txtnum" maxlength="1"/> </td>
          </tr>
          <tr>
            <td> <input type="submit" value="submit form"/></td>
            <td> <input type="reset" value="Reset"/></td>
          </tr>
        </table>
        </form>
    </body>
</html>
```

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-SHRININKING</p>
</body>
<script>
//Global declerations
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-shriniking"
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 usingXHTML 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:

Marksin Percentage	Grade
>=90	A
>=80	B
>=60	C
>=40	D
<40	F

```
<!DOCTYPE html>

<html>

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


</head>

<body>
<form action="http://localhost/TEST/student.php"  method="post">
Enter Details of student
Name:<input type="text" name="NAME"/><br/>
USN:<input type="text" name="USN"/><br/>
Enter Marks for the below subjects:
Web Internet Programming:<input type="text" name="WIP"/><br/>
Computer Networks:<input type="text" name="CN"/><br/>
Data Warehousing and Data Mining:<input type="text" name="DWDM"/><br/>
<input type="submit" value="submit"/><br/>
<input type="reset" value="reset"/><br/>
</form>
</body>
</html>
```

student.php

```
<?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>";
?>
```

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.

Emp.html

```
<!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/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><br />";
}
$db=mysqli_select_db($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/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 name='$emp_id'");
$rows=mysqli_num_rows($result);
if($rows==0)
{
echo "<i style='color:red;'>There are no rows with the name as $emp_id<i>";
}
else
{
echo "<i style='color:blue'>num of rows in the user_detail table with user name as $emp_id are $rows</i><br />";
echo "<table border='1'><tr><th>Name</th><th>emp_id</th><th>exp</ht></tr>";
for($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>
```

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, Brach, 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.

```
<?xml version="1.0" encoding="utf-8"?>
<?xml-stylesheet type="text/css" href="vtu.css"?>

<!DOCTYPE [ VTU <!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 NHCE "New Horizon College of Engineering,Bengaluru">
]>
<VTU>
        <STUDENT>
                <USN>1NH17IS001</USN>
                <NAME>AAAAA</NAME>
                <COLLEGE>NHCE</COLLEGE>
                <BRANCH>ise</BRANCH>
                <YOJ>2017</YOJ>
                <EMAIL>AAAAA@GMAIL.COM</EMAIL>
        </STUDENT>
        <STUDENT>
                <USN>1NH17CS002</USN>
                <NAME>BBBBB</NAME>
```

```
        <COLLEGE>NHCE</COLLEGE>
        <BRANCH>cse</BRANCH>
        <YOJ>2017</YOJ>
        <EMAIL>BBBBB@GMAIL.COM</EMAIL>
    </STUDENT>
    <STUDENT>
        <USN>1NH17IS003</USN>
        <NAME>CCCCC</NAME>
        <COLLEGE>NHCE</COLLEGE>
        <BRANCH>ise</BRANCH>
        <YOJ>2017</YOJ>
      <EMAIL>CCCCC@GMAIL.COM</EMAIL>
    </STUDENT>
</VTU>
```

vtu.css

```
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;}
```

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, Brach, 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" ?>
<?xml-stylesheet type="text/xsl" href="sstudent.xsl" ?>
<VTU>
    <STUDENT>
```

```
        <USN>1NH17IS001</USN>
        <NAME>AAAAA</NAME>
        <COLLEGE>NHCE</COLLEGE>
        <BRANCH>ISE</BRANCH>
        <YOJ>2017</YOJ>
        <EMAIL>AAAAA@GMAIL.COM</EMAIL>
    </STUDENT>
    <STUDENT>
        <USN>1NH17CS002</USN>
        <NAME>BBBBB</NAME>
        <COLLEGE>NHCE</COLLEGE>
        <BRANCH>CSE</BRANCH>
        <YOJ>2017</YOJ>
        <EMAIL>BBBBB@GMAIL.COM</EMAIL>
    </STUDENT>
    <STUDENT>
        <USN>1NH17IS003</USN>
        <NAME>CCCCC</NAME>
        <COLLEGE>NHCE</COLLEGE>
        <BRANCH>ISE</BRANCH>
        <YOJ>2017</YOJ>
      <EMAIL>CCCCC@GMAIL.COM</EMAIL>
    </STUDENT>
</VTU>
```

Student.xsl

```
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0"
        xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
 <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='1NH17CS002']">
        <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>
```