

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELGAVI-590018, KARNATAKA



WEB TECHNOLOGY LABORATORY WITH MINI PROJECT- 15CSL77

LAB MANUAL

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Department of Computer Science and Engineering

M.S Engineering College

(NAAC Accredited and An ISO 9001:2015 Certified Institution)

(Affiliated to Visvesvaraya Technological University Belgaum and approved by AICTE, New Delhi)

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CONTENTS

	Page no.
1. Syllabus	1
2. Program 1 - JavaScript : Simple calculator	4
3. Program 2 - JavaScript : Calculate squares and cubes of the numbers from 0 to 10	8
4. Program 3 - JavaScript : TEXT-GROWING and TEXT-SHRINKING	10
5. Program 4 - HTML5 and JavaScript :	12
a) position in the string of the left-most vowel	
b) number with its digits in the reverse order	
6. Program 5 - XML document to store information about a student	14
7. Program 6 - PHP : display the number of visitors visiting the web page.	17
8. Program 7 - PHP : display digital clock with current time of the server.	19
9. Program 8 - PHP :	
a) Implement simple calculator operations.	19
b) Find the Transpose of a matrix, Multiplication of two matrices and Addition of two matrices.	24
10. Program 9 – PHP : program with variable states with value "Mississippi Alabama Texas Massachusetts Kansas"	26
11. Program 10 – PHP : program to sort the student records using selection sort.	27

SYLLBUS 15CSL77**WEB TECHNOLOGY LABORATORY WITH MINI PROJECT**

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017)

SEMESTER – VII

Subject Code	15CSL77	IA Marks	20
Number of Lecture Hours/Week	01I + 02 P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

Course Objectives:

This course will enable students to

1. Design and develop static and dynamic web pages.
2. Familiarize with Client-Side Programming, Server-Side Programming, Active server Pages.
3. Learn Database Connectivity to web applications.

Course outcomes:

The students should be able to:

- Design and develop dynamic web pages with good aesthetic sense of designing and latest technical know-how's.
- Have a good understanding of Web Application Terminologies, Internet Tools other web services.
- Learn how to link and publish web sites.

Lab Syllabus

1. Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.
2. Write a JavaScript that calculates the squares and cubes of the numbers from 0 to 10 and outputs HTML text that displays the resulting values in an HTML table format.
3. Write a JavaScript code 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.

4. Develop and demonstrate a HTML5 file that includes JavaScript script that uses functions for the following problems:
 - a) Parameter: A string
 - b) Output: The position in the string of the left-most vowel
 - c) Parameter: A number
 - d) Output: The number with its digits in the reverse order
5. Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, and Name of the College, Branch, Year of Joining, and email id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the document.
6. Write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors, with proper headings.
7. Write a PHP program to display a digital clock which displays the current time of the server.
8. Write the PHP programs to do the following:
 - a) Implement simple calculator operations.
 - b) Find the transpose of a matrix.
 - c) Multiplication of two matrices.
 - d) Addition of two matrices.
9. Write a PHP program named states.py that declares a variable states with value "Mississippi Alabama Texas Massachusetts Kansas". write a PHP program that does the following:
 - a) Search for a word in variable states that ends in xas. Store this word in element0 of a list named states List.
 - b) Search for a word in states that begins with k and ends in s. Perform a case-insensitive comparison. [Note: Passing re.I as a second parameter to method compile performs a case-insensitive comparison.] Store this word in element1 of states List.
 - c) Search for a word in states that begins with M and ends in s. Store this word in element 2 of the list.

- d) Search for a word in states that ends in a. Store this word in element 3 of the list.

10. Write a PHP program to sort the student records which are stored in the database using selection sort.

Study Experiment / Project:

Develop a web application project using the languages and concepts learnt in the theory and Exercises listed in part A with a good look and feel effects. You can use any web technologies and frameworks and databases.

Note:

1. In the examination each student picks one question from part A.
2. A team of two or three students must develop the mini project. However during the examination, each student must demonstrate the project individually.
3. The team must submit a brief project report (15-20 pages) that must include the following:
 - a) Introduction
 - b) Requirement Analysis
 - c) Software Requirement Specification
 - d) Analysis and Design
 - e) Implementation
 - f) Testing

Conduction of Practical Examination:

1. All laboratory experiments from part A are to be included for practical examination.
2. Mini project has to be evaluated for 30 Marks.
3. Report should be prepared in a standard format prescribed for project work.
4. Students are allowed to pick one experiment from the lot.
5. Strictly follow the instructions as printed on the cover page of answer script.
6. Marks distribution:
 - a) Part A: Procedure + Conduction + Viva: 10 + 35 + 5 = 50 Marks
 - b) Part B: Demonstration + Report + Viva voce = 15 + 10 + 05 = 30 Marks. Change of experiment is allowed only once and marks allotted to the procedure part to be made zero.

Exp1: Simple Calculator using Java script

Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.

Aim:

To Write a JavaScript to design a simple calculator

Algorithm/Procedure:

1. Create a webpage with the name program1.html.
2. Create table for Calculator using Html code.
3. Create html form and input field for each entry.

PROGRAM:

```
<!DOCTYPE
HTML> <html>
<head>
    <style>
        table, td, th
        {
            border: 1px solid black;
            width: 33%;
            text-align: center;
            background-color: DarkGray;
            border-collapse: collapse;
        }
        table { margin: auto; }
        input { text-align: right; }
    </style>
    <script type="text/javascript">
        function calc(clicked_id)
        {
            Var val1 =
                parseFloat(document.getElementById("value1").value);
```

```
var val2 =
parseFloat(document.getElementById("value2").value);
if(isNaN(val1)||isNaN(val2))
    alert("ENTER VALID NUMBER");
else if(clicked_id=="add")
    document.getElementById("answer").value=val1+val
2;
else if(clicked_id=="sub")
    document.getElementById("answer").value=val1-
val2;
else if(clicked_id=="mul")
    document.getElementById("answer").value=val1*val2;
    else if(clicked_id=="div")
    document.getElementById("answer").value=val1/val2;
}
function cls()
{
    value1.value="0";
    value2.value="0";
    answer.value="";
}
</script>
</head>
<body>
<table>
<tr><th colspan="4"> SIMPLE CALCULATOR </th></tr>
<tr><td>value1</td><td><input type="text" id="value1"
value="0"/></td> <td>value2</td><td><input type="text" id="value2"
value="0"/> </td></tr> <tr><td><input type="button" value="Addition"
id = "add" onclick="calc(this.id)"></td>
<td><input type="button" value="Subtraction" id = "sub"
onclick="calc(this.id)"></td>
<td><input type="button" value="Multiplication" id = "mul"
```

```

onclick="calc(this.id)"/></td>
<td><input type="button" value="Division" id="div"
onclick="calc(this.id)"/></td></tr>
<tr><td>Answer:</td><td><input type="text" id="answer" value=""
disabled/></td>
<td colspan="2"><input type="button" value="CLEAR ALL"
onclick="cls()"/></td></tr>
</table>
</body>
</html>

```

Sample input and Output:

SIMPLE CALCULATOR			
value1	<input type="text"/>	value2	<input type="text"/>
Addition	Subtraction	Multiplication	Division
Answer:	<input type="text"/>	CLEAR ALL	

Sample Test Cases :

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	value1=50.56 value2=24.39	Addition =74.95 Subtraction =26.17 Multiplication=1233.1584 Division=2.072980729807298	Addition =74.95 Subtraction =26.17 Multiplication=1233.1584 Division=2.072980729807298	PASS
2.	value1= 0 value2= 45	Addition =45 Subtraction =-45 Multiplication=0 Division=0	Addition =45 Subtraction =-45 Multiplication=0 Division=0	PASS
3.	value1= 45 value2= 0	Addition =45 Subtraction =45 Multiplication=0 Division=Infinity	Addition =45 Subtraction =45 Multiplication=0 Division=Infinity	PASS

4.	value1 = abc value2 = 23	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS
5	value1 = 50 value2 =xyz	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS

Exp 2: Squares and Cubes of number from 1 to 10

Write a JavaScript that calculates the squares and cubes of the numbers from 0 to 10 and outputs HTML text that displays the resulting values in an HTML table format.

Aim:

To Write a JavaScript to Calculate the Squares and Cubes of numbers.

Algorithm/Procedure:

1. Create a webpage with the name program2.html
2. Create table for displaying squares and cubes using Html code.
3. Create Java script to calculate the squares and Cubes for numbers.

program2.html

```
<!DOCTYPE
```

```
HTML> <html>
```

```
  <head>
```

```
    <style> table,tr,
```

```
      td
```

```
      {
```

```
        border: solid black;
```

```
        width: 33%;
```

```
        text-align: center;
```

```
        border-collapse: collapse;
```

```
        background-
```

```
        color:lightblue;
```

```
      }
```

```
      table { margin: auto; }
```

```
    </style>
```

```
    <script>
```

```
      document.write( "<table><tr><th colspan='3'> NUMBERS FROM 0 TO 10  
      WITH THEIR SQUARES AND CUBES </th></tr>" );
```


```
      document.write( "<tr><td>Number</td><td>Square</td><td>Cube</td></tr>" );
```

```
      for(var n=0; n<=10; n++)
```

```
      {
```

```
        document.write( "<tr><td>" + n + "</td><td>" + n*n + "</td><td>" +  
        n*n*n + "</td></tr>" );
```

```
    }  
    document.write( "</table>" );  
  </script>  
</head>  
</html>
```

Sample Output:

NUMBERS FROM 0 TO 10 WITH THEIR SQUARES AND CUBES		
Number	Square	Cube
0	0	0
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729
10	100	1000

Exp 3: JavaScript: Text-Growing and Text Shrinking

Write a JavaScript code 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.

Aim:

To write a JavaScript: Text-Growing and Text Shrinking

Program 3.html

```
<!DOCTYPE HTML>
<html>
<head>
  <style>
    p {
      position: absolute;
      top: 50%;
      left: 50%;
      transform: translate(-50%, -50%);
    }
  </style>
</head>
<body>
  <p id="demo"></p>
  <script>
    var var1 = setInterval(inTimer, 1000);
    var fs = 5;
    var ids = document.getElementById("demo");
    function inTimer() {
      ids.innerHTML = 'TEXT GROWING';
      ids.setAttribute('style', "font-size: " + fs + "px; color: red"); fs += 5;
      if(fs >= 50 ){
        clearInterval(var1);
        var2 = setInterval(deTimer, 1000);
```

```
    }  
  }  
  function deTimer() {  
    fs -= 5;  
    ids.innerHTML = 'TEXT SHRINKING';  
    ids.setAttribute('style', "font-size: " + fs + "px; color:  
blue"); if(fs === 5 ){  
      clearInterval(var2);  
    }  
  }  
</script>  
</body>  
</html>
```

Sample Output:

TEXT-GROWING

TEXT SHRINKING

Exp 4: HTML5 and JavaScript : position in the string of the left-most vowel and number with its digits in the reverse order

Develop and demonstrate a HTML5 file that includes JavaScript script that uses functions for the following problems:

- a) Parameter: A string
- b) Output: The position in the string of the left-most vowel
- c) Parameter: A number
- d) Output: The number with its digits in the reverse order

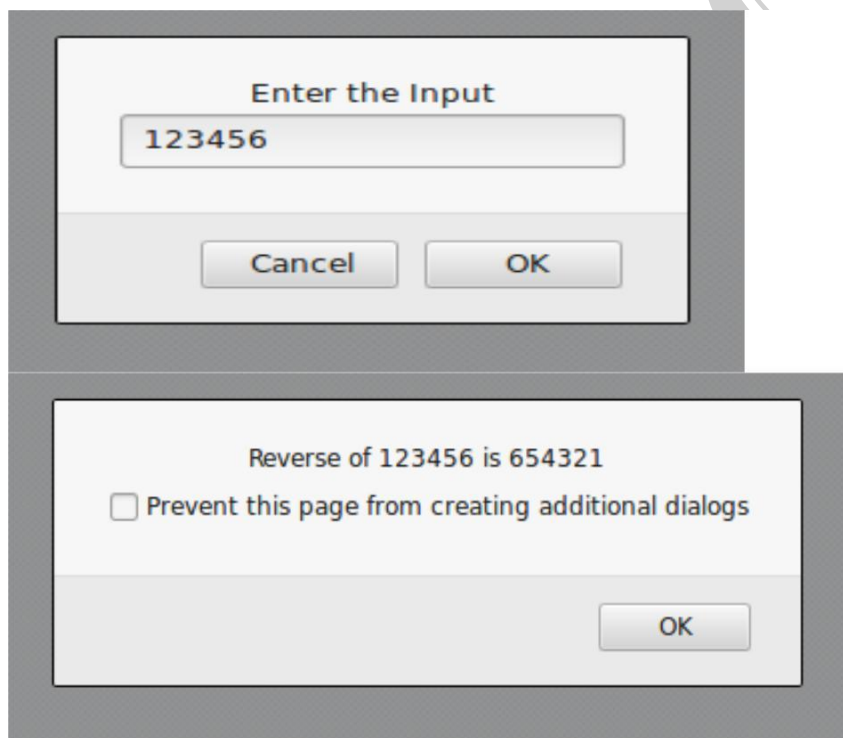
Aim:

To write a JavaScript : position in the string of the left-most vowel and number with its digits in the reverse order

Program 4.html

```
<!DOCTYPE HTML>
<html>
<body>
  <script type="text/javascript">
    var str = prompt("Enter the Input","");
    if(!(isNaN(str)))
    {
      var num,rev=0,remainder;
      num = parseInt(str);
      while(num!=0) {
        remainder = num%10;
        num = parseInt(num/10);
        rev = rev * 10 + remainder;
      }
      alert("Reverse of "+str+" is "+rev);
    }
    else
    {
      str = str.toUpperCase();
```

```
for(var i = 0; i < str.length; i++) {  
    var chr = str.charAt(i);  
    if(chr == 'A' || chr == 'E' || chr == 'T' || chr == 'O' || chr == 'U')break;  
}  
if( i < str.length )  
    alert("The position of the left most vowel is "+(i+1));  
else  
    alert("No vowel found in the entered string");  
}  
</script>  
</body>  
</html>
```

Sample Output :

Exp 5: XML document to store information about a student.

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

Aim:

To design a XML document to store information about a student.

Program 5.xml

```
<?xml-stylesheet type="text/css" href="5.css" ?>
<!DOCTYPE HTML>
<html>
  <head>
    <h1> STUDENTS DESCRIPTION </h1>
  </head>
  <students>
    <student>
      <USN>USN      : 1ME15CS001</USN>
      <name>NAME     : SANVI</name>
      <college>COLLEGE : MSEC</college>
      <branch>BRANCH  : Computer Science and Engineering</branch>
      <year>YEAR      : 2015</year>
      <e-mail>E-Mail   : sanvi@gmail.com</e-mail>
    </student>
    <student>
      <USN>USN      : 1ME15IS002</USN>
      <name>NAME     : MANORANJAN</name>
      <college>COLLEGE : MSEC</college>
      <branch>BRANCH  : Information Science and Engineering</branch>
      <year>YEAR      : 2015</year>
      <e-mail>E-Mail   : manoranjana@gmail.com</e-mail>
    </student>
    <student>
      <USN>USN      : 1ME13EC003</USN>
```



```
<name>NAME      : CHANDANA</name>
<college>COLLEGE : MSEC</college>

<branch>BRANCH  : Electronics and Communication Engineering
</branch>

<year>YEAR      : 2013</year>
<e-mail>E-Mail   : chandana@gmail.com</e-mail>
</student>
</students>
</html>
```

Program 5.css

```
student{
    display:block; margin-top:10px; color:Navy;
}
USN{
    display:block; margin-left:10px;font-size:14pt; color:Red;
}
name{
    display:block; margin-left:20px;font-size:14pt; color:Blue;
}
college{
    display:block; margin-left:20px;font-size:12pt; color:Maroon;
}
branch{
    display:block; margin-left:20px;font-size:12pt; color:Purple;
}
year{
    display:block; margin-left:20px;font-size:14pt; color:Green;
}
e-mail{
    display:block; margin-left:20px;font-size:12pt; color:Blue;
}
```

Sample Output:

STUDENTS DESCRIPTION

USN: 1ME15CS001

NAME: SANVI

COLLEGE: MSEC

BRANCH: Computer Science and Engineering

YEAR: 2015

E-Mail: sanvi@gmail.com

USN: 1ME15S002

NAME: MANORANJAN

COLLEGE: MSEC

BRANCH: Information Science and Engineering

YEAR: 2015

E-Mail: manoranjana@gmail.com

USN: 1ME13CS003

NAME: CHANDANA

COLLEGE: MSEC

BRANCH: Electronics and Communication Engineering

YEAR: 2013

E-Mail: chandana@gmail.com

Exp 6: PHP - Display the number of visitors visiting the web page.

Write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors, with proper headings.

Aim:

To write a PHP Program to Display the number of visitors visiting the web page.

Program 6.php

```
<?php
    print "<h3> REFRESH PAGE </h3>";
    $name="counter.txt";
    $file = fopen($name,"r");
    $hits= fscanf($file,"%d");
    fclose($file);

    $hits[0]++;
    $file = fopen($name,"w");
    fprintf($file,"%d",$hits[0]);
    fclose($file);

    print "Total number of views: ".$hits[0];
?>
```

Sample Output:

REFRESH PAGE

Total number of views: 10

Exp 7: PHP Program to display digital clock with current time of the Server.

Write a PHP program to display a digital clock which displays the current time of the server.

Aim:

To Write a PHP Program to display digital clock with current time of the Server.

Program 7.php

```
<!DOCTYPE HTML>
<html>
<head>
    <meta http-equiv="refresh" content="1"/>
    <style>
        p {
            color:white;
            font-size:90px;
            position: absolute;
            top: 50%;
            left: 50%;
            transform: translate(-50%, -50%);
        }
        body{background-color:black;}
    </style>
    <p> <?php echo date(" h: i : s A");?> </p>
</head>
```

Sample Output:



10: 44 : 08 AM

**Exp 8: PHP Program for a) Implement simple calculator operations.
b) Find the Transpose of a matrix, Multiplication of two matrices and Addition of two matrices.**

Write the PHP programs to do the following:

- a) Implement simple calculator operations.
- b) Find the transpose of a matrix.
- c) Multiplication of two matrices.
- d) Addition of two matrices.

Aim:

To write a PHP program to implement the Simple Calculator and Multiplication of Matrices.

Program 8a.php

```
<html>
<head>
    <style>
        table, td, th
        {
            border: 1px solid black;
            width: 35%;
            text-align: center;
            background-color: DarkGray;
        }
        table { margin: auto; }
        input, p { text-align: right; }
    </style>
</head>
<body>
    <form method="post">
        <table>
            <caption><h2> SIMPLE CALCULATOR </h2></caption>>
            <tr><td>First Number:</td><td><input type="text" name="num1"
            /></td>
            <td rowspan="2"><input type="submit"
            name="submit">
```

```

        value="calculate"></td></tr>
        <tr><td>Second          Number:</td><td><input
                                type="text"
                                name="num2"/></td></tr>
    </form>

    <?php
        if(isset($_POST['submit'])) // it checks if the input submit is filled
        {
            $num1 = $_POST['num1'];
            $num2 = $_POST['num2'];
            if(is_numeric($num1) and is_numeric($num2) )
            {
                echo "<tr><td> Addition :</td><td><p>".($num1+$num2)."</p></td>";
                echo "<tr><td> Subtraction :</td><td><p> ".($num1-$num2)."</p></td>";
                echo "<tr><td> Multiplication
                :</td><td><p>".($num1*$num2)."</p></td>";
                echo "<tr><td>Division :</td><td><p> ".($num1/$num2)."</p></td>";
                echo "</table>";
            }
            else
            {
                echo "<script type='text/javascript' > alert(' ENTER
                VALID NUMBER');</script>";
            }
        }
    ?>
</body>
</html>

```

Sample Output:**SIMPLE CALCULATOR**

First Number:	50	calculate
Second Number:	25	
Addition :	75	
Subtraction :	25	
Multiplication :	1250	
Division :	2	

Test Cases:

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	value1=50.56 value2=24.39	Addition =74.95 Subtraction =26.17 Multiplication=1233.1584 Division=2.072980729807298	Addition =74.95 Subtraction =26.17 Multiplication=1233.1584 Division=2.072980729807298	PASS
2.	value1= 0 value2= 45	Addition =45 Subtraction =-45 Multiplication=0 Division=0	Addition =45 Subtraction =-45 Multiplication=0 Division=0	PASS
3.	value1= 45 value2= 0	Addition =45 Subtraction =45 Multiplication=0 Division=Infinity	Addition =45 Subtraction =45 Multiplication=0 Division=Infinity	PASS
4.	value1 = abc value2 = 23	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS
5	value1 = 50 value2 =xyz	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS

Program 8b.php

```

<?php
    $a = array(array(1,2,3),array(4,5,6),array(7,8,9));
    $b = array(array(7,8,9),array(4,5,6),array(1,2,3));
    $m=count($a);

    $n=count($a[2]);

    $p=count($b);

    $q=count($b[2]);

    echo "the first matrix   :". "<br/>";

```

```
for ($row = 0; $row < $m; $row++) {  
    for ($col = 0; $col < $n; $col++)  
        echo " ".$a[$row][$col];  
    echo "<br/>";  
}  
  
echo "the second matrix  :". "<br/>";  
for ($row = 0; $row < $p; $row++) {  
    for ($col = 0; $col < $q; $col++)  
        echo " ".$b[$row][$col];  
    echo "<br/>";  
}  
  
echo "the transpose for the first matrix  
is:". "<br/>"; for ($row = 0; $row < $m; $row++) {  
    for ($col = 0; $col < $n; $col++)  
        echo " ".$a[$col][$row];  
    echo "<br/>";  
}  
if(($m=== $p) and ($n=== $q)) {  
    echo "the addition of matrices is:". "<br/>";  
    for ($row = 0; $row < 3; $row++) {  
        for ($col = 0; $col < 3; $col++)  
            echo " ".$a[$row][$col]+$b[$row][$col]."  
"; echo "<br/>";  
    }  
}  
  
if($n=== $p){  
    echo " The multiplication of matrices: <br/>";  
    $result=array();
```



```

    for ($i=0; $i < $m; $i++) {
        for($j=0; $j < $q; $j++){

            $result[$i][$j] = 0;

            for($k=0; $k < $n; $k++)

                $result[$i][$j] += $a[$i][$k] * $b[$k][$j];

        }
    }
    for ($row = 0; $row < $m; $row++) {
        for ($col = 0; $col < $q; $col++)
            echo " ". $result[$row][$col];
        echo "<br/>";
    }
}
?>

```

Sample Output:**The first matrix:**

1 2 3

4 5 6

7 8 9

The second matrix:

7 8 9

4 5 6

1 2 3

The transpose of the first matrix:

1 4 7

2 5 8

3 6 9

The addition of matrices is:

8 10 12

8 10 12

8 10 12

the multiplication of matrices:

18 24 30

54 69 84

90 114 138

Exp 9: PHP program with variable states with value “Mississippi Alabama Texas Massachusetts Kansas”

Write a PHP program named states.py that declares a variable states with value "Mississippi Alabama Texas Massachusetts Kansas". write a PHP program that does the following:

- Search for a word in variable states that ends in xas. Store this word in element 0 of a list named states List.
- Search for a word in states that begins with k and ends in s. Perform a case insensitive comparison. [Note: Passing re.I as a second parameter to method compile performs a case-insensitive comparison.] Store this word in element1 of states List.
- Search for a word in states that begins with M and ends in s. Store this word in element 2 of the list.
- Search for a word in states that ends in a. Store this word in element 3 of the list.

Aim:

Write a PHP program with variable states with value “Mississippi Alabama Texas Massachusetts Kansas”

Program 9.php

<?php

```
$states = "Mississippi Alabama Texas Massachusetts  
Kansas"; $statesArray = [];  
$states1 = explode(' ', $states);  
echo "Original Array :<br>";  
foreach ( $states1 as $i => $value )  
    print("STATES[$i]=$value<br>");  
foreach($states1 as $state) {  
    if(preg_match( '/xas$/', ($state)))  
        $statesArray[0] = ($state);  
}  
foreach($states1 as $state) {  
    if(preg_match('/^k.*s$/i', ($state)))  
        $statesArray[1] = ($state);
```

```
}  
foreach($states1 as $state) {  
    if(preg_match('/^M.*s$/', ($state)))  
        $statesArray[2] = ($state);  
}  
foreach($states1 as $state){  
    if(preg_match('/a$/', ($state)))  
        $statesArray[3] = ($state);  
}  
echo "<br><br>Resultant Array :<br>";  
foreach ( $statesArray as $array => $value )  
    print("STATES[$array]=$value<br>");  
?>
```

Sample Output:

Original Array :
STATES[0]=Mississippi
STATES[1]=Alabama
STATES[2]=Texas
STATES[3]=Massachusetts
STATES[4]=Kansas

Resultant Array :
STATES[0]=Texas
STATES[1]=Kansas
STATES[2]=Massachusetts
STATES[3]=Alabama

Exp 10: PHP - program to sort the student records using selection sort.

Write a PHP program to sort the student records which are stored in the database using selection sort.

Aim:

To write a PHP - program to sort the student records using selection sort.

Goto Mysql and then type

```
create database weblab;
```

```
use weblab;
```

```
create table student(usn varchar(10),name varchar(20),address varchar(20));
```

program10.php

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<style>
```

```
table, td, th
```

```
{
```

```
border: 1px solid black;
```

```
width: 33%;
```

```
text-align: center;
```

```
border-collapse: collapse;
```

```
background-color: lightblue;
```

```
}
```

```
table { margin: auto; }
```

```
</style>
```

```
<?php
```

```
$servername = "localhost";
```

```
$username = "root";
```

```
$password = "root";
```

```
$dbname = "weblab";
```

```
$a=[];
```

```
// Create connection
```

```
// Opens a new connection to the MySQL server
```

```
$conn = mysqli_connect($servername, $username, $password, $dbname);  
// Check connection and return an error description from the last  
connection error, if any  
  
if ($conn->connect_error)  
    die("Connection failed: " . $conn->connect_error);  
  
$sql = "SELECT * FROM student";  
// performs a query against the  
database $result = $conn->query($sql);  
echo "<br>";  
echo "<center> BEFORE SORTING  
</center>"; echo "<table border='2'>";  
echo "<tr>";  
echo  
"<th>USN</th><th>NAME</th><th>Address</th></tr>"; if  
($result->num_rows > 0)  
{  
    // output data of each row and fetches a result row as an  
    associative array  
    while($row = $result->fetch_assoc()){  
        echo "<tr>";  
        echo "<td>". $row["usn"]. "</td>";  
        echo "<td>". $row["name"]. "</td>";  
        echo "<td>". $row["addr"]. "</td></tr>";  
        array_push($a,$row["usn"]);  
    }  
}  
else  
    echo "Table is Empty";  
echo "</table>";  
$n=count($a);  
$b=$a;  
for ( $i = 0 ; $i< ($n - 1) ; $i++ )  
{  
    $pos= $i;
```

```
        echo "<td>". $d[$i]. "</td></tr>";  
    }  
    echo "</table>";  
    $conn->close();  
?  
</body>  
</html>
```

Sample Output:

USN	NAME	ADDRESS
1ME14	CHANDANA	MANDYA
1ME15	ARUN	HASSAN
1ME16	ABHAY	BENGALURU
1ME13	SANJAY	KOLAR

BEFORE SORTING

AFTER SORTING

USN	NAME	ADDRESS
1ME16	ABHAY	BENGALURU
1ME15	ARUN	HASSAN
1ME14	CHANDANA	MANDYA
1ME13	SANJAY	KOLAR