

# **DAYANANDA SAGAR ACADEMY OF TECHNOLOGY & MANAGEMENT**

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Accredited by NBA,NewDelhi

## **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**



**Academic Year: 2020-2021**

## **WEB TECHNOLOGY LABORATORY (18CS63)**

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## WEB TECHNOLOGY LABORATORY

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

**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 and other web services.
- Recall how to link and publish web sites

**Mandatory Note:**

Distribution of CIE Marks is as follows (Total 40 Marks):

- 20 Marks through IA Tests
- 20 Marks through practical assessment

**Maintain a copy of the report for verification during LIC visit.**

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

program1.html

```
<!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+val2;
            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="Additi
    on" 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>
```

**Output:**

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

**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



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.

**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><thcolspan='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>
```

**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

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.

**program3.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);
            }
        }
    </script>
</body>
</html>
```

```
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>
```

**Output:**

TEXT-GROWING

TEXT SHRINKING

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

**program4.html**

```
<!DOCTYPE HTML>

<html>

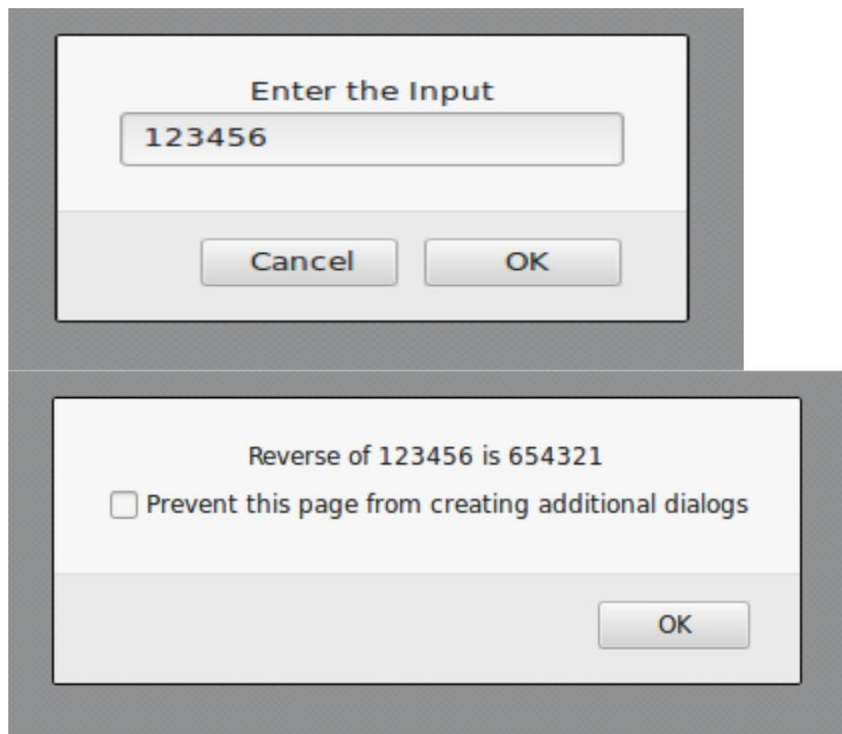
  <body>

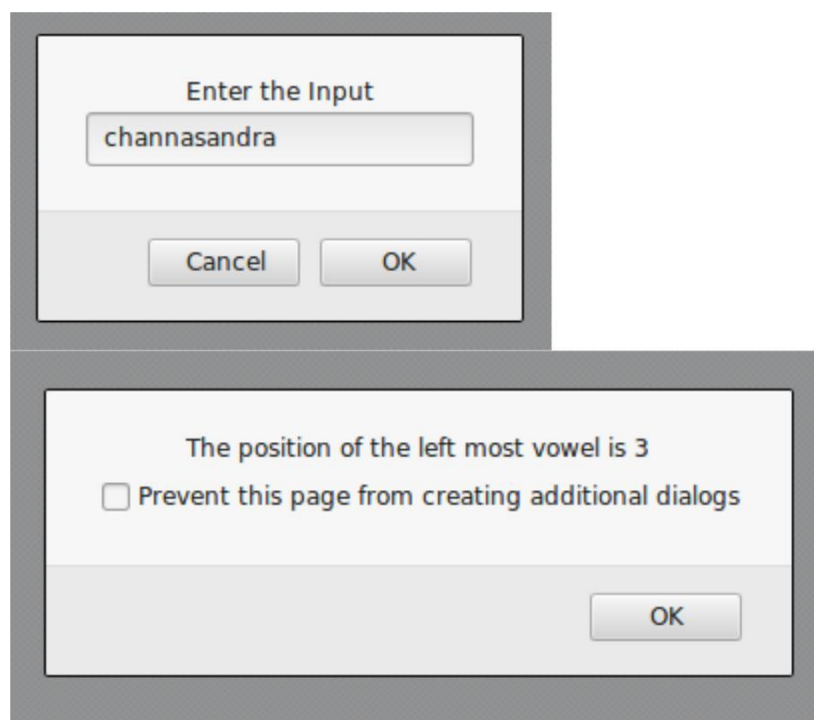
    <script type="text/javascript">
      var str = prompt("Enter the Input","");
      if(!(isNaN(str)))
      {
        var num,rev=0,remainder;
        num = parseInt(str);

        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 == 'I' || chr == 'O' || chr == 'U')break;
        }
      }
    </script>
  </body>
</html>
```

```
        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>
```

**Output :**



**Test Cases :**

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	123	Reverse of 123 is 321	Reverse of 123 is 321	PASS
1.	CHANNASANDRA	The position of the left most vowel is 3	The position of the left most vowel is 3	PASS
2.	SKY	No vowel found in the entered string	No vowel found in the entered string	PASS
3.	MNKTO	The position of the left most vowel is 5	The position of the left most vowel is 5	PASS

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.

**program5.xml**

```
<?xml-stylesheet type="text/css" href="pgm5.css" ?>
<!DOCTYPE HTML>
<html>
    <head>
        <h1> STUDENTS DESCRIPTION </h1>
    </head>
    <students>
        <student>
            <USN>USN      : 1DT18CS001</USN>
            <name>NAME      : VINAYAKA</name>
            <college>COLLEGE : DSATM</college>
            <branch>BRANCH  : Computer Science and Engineering</branch>
            <year>YEAR      : 2018</year>
            <e-mail>E-Mail   : vinayakadsatm@gmail.com</e-mail>
        </student>
        <student>
            <USN>USN      : 1DT18CS012</USN>
            <name>NAME      : RAJA</name>
            <college>COLLEGE : DSATM</college>
            <branch>BRANCH  : Computer Science and Engineering</branch>
            <year>YEAR      : 2018</year>
            <e-mail>E-Mail   : rajamadhu@gmail.com</e-mail>
        </student>
        <student>
            <USN>USN      : 1DT15EC401</USN>
            <name>NAME      : RAM</name>
            <college>COLLEGE : DSATM</college>
```



```
<branch>BRANCH : Electronics and Communication Engineering
</branch>
<year>YEAR      : 2018</year>
<e-mail>E-Mail   : ram@gmail.com</e-mail>
</student>
</students>
</html>
```

### **pgm5.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;
}
```

Output:

STUDENTS DESCRIPTION

USN : 1DT18CS001

NAME : VINAYAKA

COLLEGE : DSATM

BRANCH : Computer Science and Engineering

YEAR : 2018

E-Mail : vinayakadsatm@gmail.com

USN : 1DT18CS012

NAME : RAJA

COLLEGE : DSATM

BRANCH : Computer Science and Engineering

YEAR : 2018

E-Mail : rajamadhu@gmail.com

USN : 1DT15EC401

NAME : RAM

COLLEGE : DSATM

BRANCH : Electronics and Communication Engineering

YEAR : 2018

E-Mail : ram@gmail.com

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.

**program6.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];
?>
```

**Output:**

**REFRESH PAGE**

**Total number of views: 10**

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

**program7.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>
```

**Output:**



10: 44 : 08 AM

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.

**program8a.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>
        </table>

        <?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>
```

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

**Program8b.php**

&lt;?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 :". "&lt;br/&gt;";

```
for ($row = 0; $row < $m; $row++) {  
    for ($col = 0; $col < $n; $col++)  
        echo " ".$a[$row][$col];  
    echo "<br/>";  
}
```

echo "the second matrix :". "&lt;br/&gt;";

```
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:". "&lt;br/&gt;";

```
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/>";  
    }  
}  
?>
```

**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**

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 element 0 of a list named `statesList`.
  - 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 element 1 of `statesList`.
  - 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.

**program9.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>");  
?>
```

**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

**10. Write a PHP program to sort the student records which are stored in the database 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
lastconnection 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>";t
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;
```

```
        for ( $j = $i + 1 ; $j < $n ; $j++ ) {
            if ( $a[$pos] > $a[$j] )
                $pos= $j;
        }
        if ( $pos!= $i ) {
            $temp=$a[$i];
            $a[$i] = $a[$pos];
            $a[$pos] = $temp;
        }
    }
    $c=[];
    $d=[];
    $result = $conn->query($sql);
    if ($result->num_rows> 0)// output data of each row
    {
        while($row = $result->fetch_assoc()) {
            for($i=0;$i<$n;$i++) {
                if($row["usn"]== $a[$i]) {
                    $c[$i]=$row["name"];
                    $d[$i]=$row["addr"];
                }
            }
        }
    }
    echo "<br>";
    echo "<center> AFTER SORTING <center>";
    echo "<table border='2'>";
    echo "<tr>";
    echo "<th>USN</th><th>NAME</th><th>Address</th></tr>";
    for($i=0;$i<$n;$i++) {
        echo "<tr>";
        echo "<td>". $a[$i]. "</td>";
        echo "<td>". $c[$i]. "</td>";
    }
```

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

**Output:**

### BEFORE SORTING

USN	NAME	Address
1rn14	chandan	bengaluru
1rn07	arun	mysore
1rn01	abhi	tumkur
1rn38	Manoranjan	Mandya

### AFTER SORTING

USN	NAME	Address
1rn01	abhi	tumkur
1rn07	arun	mysore
1rn14	chandan	bengaluru
1rn38	Manoranjan	Mandya



### **Sample Viva Questions:-**

- 1. What is an intranet?**
- 2. What is a dynamic web page? How does it differ from a static page?**
- 3. What does Web 2.0 refer to?**
- 4. What is the Internet Protocol (IP)? Why is it important for web developers?**
- 5. How many levels can a domain name have? What are generic top-level domains?**
- 6. What is the LAMP stack? What are some of its common variants?**
- 7. What is the difference between XHTML and HTML5?**
- 8. Why was the XHTML 2.0 standard eventually abandoned?**
- 9. What are HTML elements? What are HTML attributes?**
- 10. What is the difference between the <p> and the <div> element? In what contexts should one use the one over the other?**
- 11. Are you allowed to use more than one <heading> element in a web page? Why or why not?**
- 12. What are the main benefits of using CSS?**
- 13. What is an element selector and a grouped element selector? Provide an example of each.**
- 14. What are class selectors? What are id selectors?**
- 15. What are pseudo-class selectors? What are they commonly used for?**
- 16. What is a web font stack?**
- 17. What are the elements used to define the structure of an HTML table?**
- 18. Describe the purpose of a table caption and the table heading elements.**
- 19. How are the rowspan and colspan attributes used?**
- 20. What is the difference between HTTP GET and POST?**
- 21. What is a query string?**
- 22. What are microformats? What is their purpose?**
- 23. In CSS, what does floating an element do? How do you float an element?**
- 24. What is responsive design?**
- 25. What is JavaScript?**
- 26. Why is JavaScript form validation not sufficient?**
- 27. In the LAMP stack, what software is responsible for responding to HTTP requests?**
- 28. Can we have two functions with the same name in PHP? Why or why not?**
- 29. What are the superglobal arrays in PHP?**
- 30. Describe the relationship between keys and indexes in arrays.**
- 31. Are arrays sorted by key or by value, or not at all?**
- 32. How would you get a random element from an array?**
- 33. What does urlencode() do? How is it “undone”?**
- 34. What information is uploaded along with a file?**
- 35. How do you read or write a file on the server from PHP?**
- 36. What classes of information are available via the \$\_SERVER superglobal array?**
- 37. What are the three access modifiers?**
- 38. What is a constructor?**
- 39. What is the advantage of polymorphism?**
- 40. What are HTTP cookies? What is their purpose?**
- 41. What is the difference between session cookies and persistent cookies?**
- 42. Describe best practices for using persistent cookies.**
- 43. What is web storage in HTML5? How does it differ from HTTP cookies?**
- 44. What is session state?**
- 45. In PHP, how are sessions stored between requests?**
- 46. What does \$() shorthand stand for in jQuery?**
- 47. How would you change the text color of all the <a> tags in jQuery (one line)?**
- 48. What do MVC frameworks accomplish?**
- 49. Write a jQuery selector to get all the <p> that contain the word “hello.”**
- 50. What is the difference between the append() and appendTo() methods?**
- 51. What are the commonly used animations in jQuery?**
- 52. What is the base method on which all jQuery animations rely?**