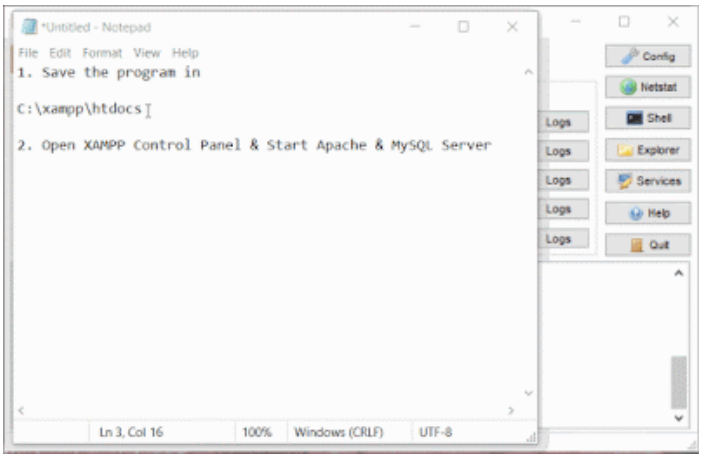
7. 1. If xampp is in the system, save the program in C:\xampp\htdocs (start apache in xampp control panel)

2. If no xampp in the system, save the program in C:\Program Files\Apache Group\Apache2\htdocs & Open Google Chrome & type http://localhost/prog7.php

prog7.php

```
<head>
 <meta http-equiv="refresh" content="1"/>
 <style>
  p {
   color:yellow;
   font-size:90px;
   position:absolute;
   top: 40%;
   left: 50%;
   transform: translate(-50%, -50%);
  }
  body {
   background-color:maroon;
  }
 </style>
 <p> <?php echo date(" h: i : s A");?> </p>
</head>
```

STEPS



OUTPUT

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.

If xampp is in the system, save the program in C:\xampp\htdocs (start apache in xampp control panel)

If no xampp in the system, save the program in C:\Program Files\Apache Group\Apache2\htdocs & Open Google Chrome & type http://localhost/prog8a.php

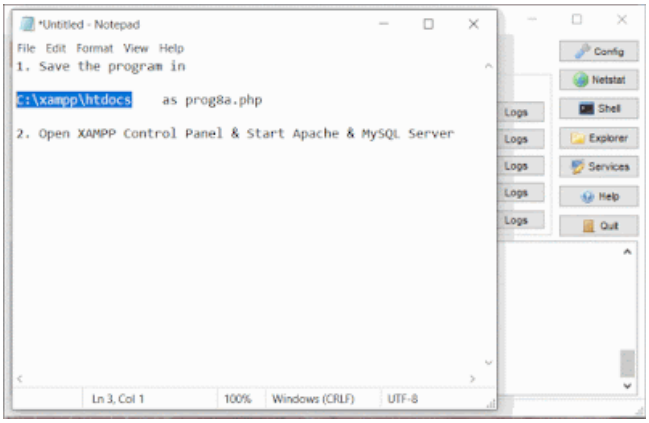
prog8a.php

```
<html>
 <head>
 <style>
  table, td, th {
   border: 1px solid black;
   width: 35%;
   text-align: center;
   background-color: lightgray;
  }
  table { margin: auto; }
  input,p { text-align:right; }
 </style>
</head>

<body>
 <form method="post" action="prog8a.php">
  <table>
  <caption><h2> SIMPLE CALCULATOR </h2></caption>
  <tr>
   <td>First Number:</td><td><input type="text" name="num1" /></td>
   <td rowspan="2"><button type="submit" name="submit" value="calculate">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> alert(' ENTER VALID NUMBER');</script>";
  }
 }
 ?>
</body>
</html>
```

STEPS



OUTPUT

SIMPLE CALCULATOR

First Number:	21	Calculate
Second Number:	07	
Addition :	28	
Subtraction :	14	
Multiplication :	147	
Division :	3	

8b.SOLUTION 1

Requires XAMPP control panel for Solution 1

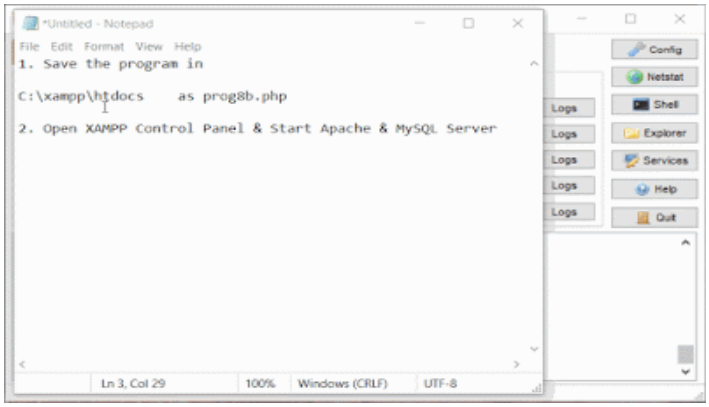
If xampp is in the system, save the program in C:\xampp\htdocs (start apache in xampp control panel) & Open Google Chrome & type http://localhost/prog8b.php

prog8b.php

```
<!DOCTYPE html>
<html>
<body>
 <?php
  function pr($a){
   foreach ($a as $b) {
    foreach ($b as $c) {
     echo $c ." ";
    }echo "<br>";
   }echo "<br>";
  }
  $a = [[1,2,3],[4,5,6],[7,8,9]];
  $b = [[7,8,9],[4,5,6],[1,2,3]];
  echo "<b>First Matrix : </b><br>" ; pr($a);
  echo "<b>Second Matrix : </b><br>"; pr($b);
  for ($i=0; $i < 3; $i++)
   for ($j=0; $j < 3; $j++)
    $c[$i][$j] = $a[$j][$i];
  echo "<b>Transpose Of First Matrix : </b><br>"; pr($c);
```

```
 for ($i=0; $i < 3; $i++)
  for ($j=0; $j < 3; $j++)
   $c[$i][$j] = $a[$i][$j] + $b[$i][$j];
 echo "<b>Addition Of Two Matrix : </b><br>"; pr($c);
 for ($i=0; $i < 3; $i++)
  for ($j=0; $j < 3; $j++){
   $c[$i][$j] = 0;
   for ($k=0; $k < 3; $k++)
    $c[$i][$j] += $a[$i][$k] * $b[$k][$j];
  }
 echo "<b>Multiplication Of Two Matrix : </b><br>"; pr($c);
 ?>
</body>
</html>
```

STEPS



OUTPUT

First Matrix :
1 2 3
4 5 6
7 8 9

Second Matrix :
7 8 9
4 5 6
1 2 3

Transpose Of First Matrix :
1 4 7
2 5 8
3 6 9

Addition Of Two Matrix :
8 10 12
8 10 12
8 10 12

Multiplication Of Two Matrix :
18 24 30
54 69 84
90 114 138

SOLUTION 2

If no xampp in the system, save the program in C:\Program Files\Apache Group\Apache 2\htdocs & Open Google Chrome & type http://localhost/prog8b.php

prog8b.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/>";
}
}
?>
```

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

09. 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 CASEINSENSITIVE COMPARISON. [NOTE: PASSING RE.IAS A SECOND PARAMETER TO METHOD COMPILE PERFORMS A CASE-INSENSITIVE COMPARISON.] STORE THIS WORD IN ELEMENT1 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.

SOLUTION 1

1. If xampp is in the system, save the program in C:\xampp\htdocs (start apache in xampp control panel)

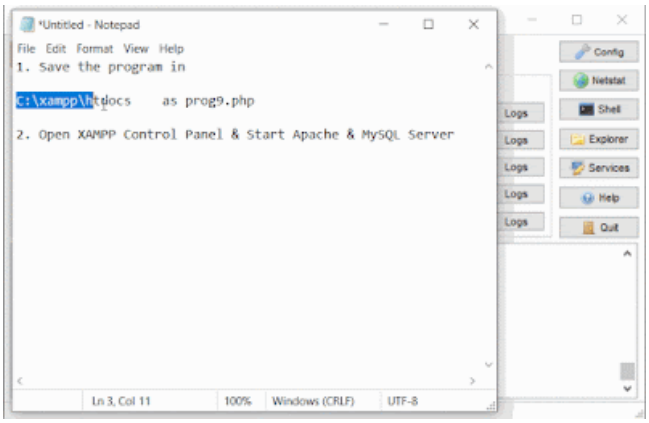
2. If no xampp in the system, save the program in C:\Program Files\Apache Group\Apache2\htdocs & Open Google Chrome & type http://localhost/prog9.php

prog9.php

```
<html>
<body>
 <?php
  $states = "Mississippi Alabama Texas Massachusetts Kansas";
  $b = explode(' ',$states);
  echo "<br>ORIGINAL ARRAY :<br>";
  foreach ( $b as $i => $value )
   echo "states[$i] = $value<br>";
  foreach ($b as $c)
  {
   $n = strlen($c);
   if($c[$n-1]=='s' && $c[$n-2]=='a' && $c[$n-3]=='x') $d[0] = $c;
   if($c[0]=='K' && $c[$n-1]=='s') $d[1] = $c;
   if($c[0]=='M' && $c[$n-1]=='s') $d[2] = $c;
```

```
  if($c[$n-1]=='a') $d[3] = $c;
 }
 echo "<br>RESULTANT ARRAY :<br>";
 for ($i=0; $i < count($d); $i++)
  echo "statesList[$i] = $d[$i]<br>";
?>
</body>
</html>
```

STEPS



OUTPUT

ORIGINAL ARRAY :
states[0] = Mississippi
states[1] = Alabama
states[2] = Texas
states[3] = Massachusetts
states[4] = Kansas

RESULTANT ARRAY :
statesList[0] = Texas
statesList[1] = Kansas
statesList[2] = Massachusetts
statesList[3] = Alabama

SOLUTION 2

prog9.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
```

9 .Program ver 2

STEPS TO EXECUTE PHP PROGRAM

1. Copy the php code given below
2. Save it with **.php** file name extension
3. Place the file in the **htdocs of XAAMP**
4. Start the XAAMP control panel
5. Start Apache server
6. Click on admin in XAMPP Control pale
7. Replace the url **dashboard name** with your php file name
8. Execution completed

Solution prog9.php

```
<html>
<body>
<?php
$states = "Mississippi Alabama Texas Massachusetts Kansas";
$b = explode(' ',$states);
echo "<br>ORIGINAL ARRAY :<br>";
```

```
foreach ( $b as $i => $value )
echo "states[$i] = $value<br>";
foreach ($b as $c)
{
$n = strlen($c);
if($c[$n-1]=='s' && $c[$n-2]=='a' && $c[$n-3]=='x') $d[0] = $c;
if($c[0]=='K' && $c[$n-1]=='s') $d[1] = $c;
if($c[0]=='M' && $c[$n-1]=='s') $d[2] = $c;
if($c[$n-1]=='a') $d[3] = $c;
}
echo "<br>RESULTANT ARRAY :<br>";
for ($i=0; $i < count($d); $i++)
echo "statesList[$i] = $d[$i]<br>";
?>
</body>
</html>
```

WEB TECHNOLOGY – Output

ORIGINAL ARRAY :
states[0] = Mississippi
states[1] = Alabama
states[2] = Texas
states[3] = Massachusetts
states[4] = Kansas

RESULTANT ARRAY :
statesList[0] = Texas
statesList[1] = Kansas
statesList[2] = Massachusetts
statesList[3] = Alabama

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

```
<!DOCTYPE
html>
            <html>
            <head>

            </head>
            <body>
```

```php
<?php
$domain = "localhost";
$username = "root";
$password = "";
$dbname = "weblab";
$a = [];

$conn = mysqli_connect($domain, $username, $password, $dbname);

if ($conn->connect_error)
    die("Connection failed: " . $conn->connect_error);
$sql = "SELECT * FROM student";

$result = $conn->query($sql);
echo "<br>";
echo "<h2>BEFORE SORTING</h2>";
echo "<table border='2'>";
echo "<tr>";
echo "<th>USN</th><th>Name</th><th>Address</th></tr>";
if ($result->num_rows > 0) {
    while ($row = $result->fetch_assoc()) {
        echo "<tr>";
        echo "<td>" . $row["usn"] . "</td>";
        echo "<td>" . $row["name"] . "</td>";
        echo "<td>" . $row["address"] . "</td></tr>";
        array_push($a, $row["usn"]);
    }
} else
    echo "Table is Empty";
echo "</table>";

$n = count($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 ($result->num_rows > 0) {
    while ($row = $result->fetch_assoc()) {
        for ($i = 0; $i < $n; $i++) {
```

```
            if ($row["usn"] == $a[$i]) {
                $c[$i] = $row["name"];
                $d[$i] = $row["address"];
            }
        }
    }
}
echo "<br>";
echo "<h2>AFTER SORTING</h2>";
echo "<table border='2'>";
echo "<tr>";
echo "<th>USN</th><th>NAME</th><th>Address</th></tr>";
for ($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>
```

9.