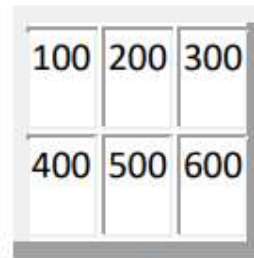


Assignment 1

Program 1:

Create an html page having table with caption as My Caption



100	200	300
400	500	600

Create the html page with column attribute in the following

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title></title>
</head>
<body>
  <table border="1px solid black">
    <caption style="text-align:right">My Caption</caption>
  <tr>

    <td>100</td>
    <td>200</td>
    <td>300</td>
```

```

        </tr>
        <tr>
            <td>400</td>
            <td>500</td>
            <td>600</td>
        </tr>
    </table>
</body>
</html>

```

Program 2:

Create the html page with colspan attribute in the following manner

Name	Telephone	
Bill Gates	555 77 854	555 77 855

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title> My Documnet</title>
    <style>
        table, th, td {
            border: 1px solid black;
            border-collapse: collapse;
        }
    </style>

```

```
tr,th{
    height: 50px;
}
</style>
</head>

<body>
    <table >

        <tr>
            <th > Name</th>
            <th colspan="2"> Telephone</th>
        </tr>

        <tr>

            <td>Bill Gates</td>
            <td colspan="1">555 77 854</td>
            <td>555 77 855</td>

        </tr>
    </table>

</body>

</html>
```

Program 3:

Create an html page having table as

First Heading	Second Heading
11	12
21	22

Create the html page with row span attribute in the following

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <title> My Document</title>
```

```
  <style>
```

```
    table, th, td {
```

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

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

```
  }
```

```
  tr,th{
```

```
    height: 50px;
```

```
    width: 200px;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<table >
```

```
<tr>
```

```
<th > First Heading</th>
```

```
<th> Second Heading</th>
```

```
</tr>
```

```
<tr>
```

```
<td>11</td>
```

```
<td>12</td>
```

```
</tr>
```

```
<tr>
```

```
<td>21</td>
```

```
<td>22</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Program 4:

Create the html page with row span attribute in the following manner

First Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <title> My Documnet</title>
```

```
<style>
```

```
table, th, td {
```

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

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

```
}
```

```
th, td {
```

```
  padding: 5px;
```

```
  text-align: left;
```

```
}
```

```
</style>
```

```
</head>
```

```

<body>

<table>
  <tr>
    <th>First Name:</th>
    <td>Bill Gates</td>
  </tr>
  <tr>
    <th rowspan="2" style="height: 80px" >Telephone:</th>
    <td>555 77 854</td>
  </tr>
  <tr>
    <td>555 77 855</td>
  </tr>
</table>

</body>
</html>

```

Program 5:

Create the html page with rowspan attribute in the following manner

	top	
left	center	right
	bottom	

```

<!DOCTYPE html>
<html lang="en">
<head>

```

```

<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<style>
    table, th, td {
        border: 1px solid black;
        border-collapse: collapse;
    }
    th, td {
        padding: 5px;
        text-align: left;
    }
</style>
</head>
<body>
    <table>
        <td rowspan="10">left</td>
        <tr>
            <td>top</td>
            <td rowspan="6">right</td></tr>

        <tr> <td>center</td></tr>

        <tr><td>bottom</td></tr>

    </table>

```



```
</body>
```

```
</html>
```

Program 6:

Create an html page and align the text of data cell in the following manner.

Left align	Right align	Center align
Hello	Hello	Hello

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <style>
```

```
      table, td, th {
```

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

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

```
        width: 300px;
```

```
      }
```

```
    </style>
```

```
  </head>
```

```
  <body>
```

```

<table>
  <tr>
    <th style="text-align: left">Left align</th>
    <th style="text-align: right">Right align</th>
    <th style="text-align: center">Center align</th>
  </tr>
  <tr>
    <td style="text-align:left">Hello</td>
    <td style="text-align:right">Hello</td>
    <td style="text-align: center">Hello</td>
  </tr>
</table>
</body>
</html>

```

Program 7:

Create the html page with rowspan and colspan attribute in the following manner

111	222	colspan 2	
333	444	colspan 2	
555	666	colspan 2	
777	888	colspan 2	
321	123	hello	World
444	555	colspan 2	
333	444	rowspan 3 and colspan 2	
222	333		
111	222		

Program 7:- Create the html page with rowspan and colspan attribute in the following manner:-

```
<html>
<head>
<title> Ass 1.7 </title>
<style>
    table, th, td {
        border: 1px solid blue;
    }
</style>
</head>
<body>
    <table>
        <tr>
            <td> 111 </td>
            <td> 222 </td>
            <td colspan="2"> colspan 2 </td>
        </tr>
        <tr>
            <td> 333 </td>
            <td> 444 </td>
            <td colspan="2"> colspan 2 </td>
        </tr>
        <tr>
            <td> 555 </td>
            <td> 666 </td>
            <td colspan="2"> colspan 2 </td>
        </tr>
    </table>
```

```

<tr>
  <td> 777 </td>
  <td> 888 </td>
  <td colspan="2"> colspan 2 </td>
</tr>

```

```

<tr>
  <td style="background-color: red;"> 321 </td>
  <td style="background-color: palevioletred;"> 123 </td>
  <td style="background-color: yellow;"> hello </td>
  <td style="background-color: lightgreen;"> World </td>
</tr>

```

```

<tr>
  <td> 444 </td>
  <td> 555 </td>
  <td colspan="2"> colspan 2 </td>
</tr>

```

```

<tr>
  <td> 333
  <td> 444
  <td colspan="2" rowspan="3" style="background-color: pink;">
    rowspan 3 and colspan 2 </td>

```

```

</tr>

```

```

<tr>

```

```

  <td> 222 </td>

```

```

  <td> 333 </td>

```

```

</tr>

```

OK
2/11/21

<tr>

<td> 111 </td>

<td> 222 </td>

</tr>

</table>

</body>

</html>

~~21/10/21~~

Program 8:

Create the html page for showing time table in the following manner

Time Table					
Hours	Mon	Tue	Wed	Thu	Fri
	Science	Maths	Science	Maths	Arts
	Social	History	English	Social	Sports
	Lunch				
	Science	Maths	Science	Maths	Project
	Social	History	English	Social	

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Time Table</title>
</head>
<body>
  <table border=1 cellspacing="0">

    <tr>
      <th colspan="6"> Time Table </th>
    </tr>
```

```
<tr>
  <th rowspan="6"> Hours </th>
  <th> Mon </th>
  <th> Tues </th>
  <th> Wed </th>
  <th> Thurs</th>
  <th> Fri </th>
</tr>
```

```
<tr>
  <td> Science </td>
  <td> Maths</td>
  <td> Science</td>
  <td> Maths </td>
  <td> Arts</td>
</tr>
```

```
<tr>
  <td> Social </td>
  <td> History</td>
  <td> English</td>
  <td> Social</td>
  <td> Sports</td>
</tr>
```

```
<tr>
  <th colspan="5"> Lunch </th>
</tr>
```

```
<tr>
```

```

        <td> Science </td>
        <td> Maths</td>
        <td> Science</td>
        <td> Maths </td>
        <td rowspan="2"> Project </td>
    </tr>

    <tr>
        <td> Social </td>
        <td> History</td>
        <td> English</td>
        <td> Social</td>
    </tr>
</table>
</body>
</html>

```

Program 10: Create an html page for the registration of the employee and use the following input elements:-Name, Address, Phone No, Email Id, Pin No, Mobile No, City, and State.

```

<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<style>
body{
    font-family: Calibri, Helvetica, sans-serif;
    background-color: pink;
}

```



```
.container {  
    padding: 50px;  
    background-color: lightblue;  
}
```

```
input[type=text],[type=email], textarea {  
    width: 100%;  
    padding: 15px;  
    margin: 5px 0 22px 0;  
    display: inline-block;  
    border: none;  
    background: #f1f1f1;  
}
```

```
div {  
    padding: 10px 0;  
}
```

```
hr {  
    border: 1px solid #f1f1f1;  
    margin-bottom: 25px;  
}
```

```
.registerbtn {  
    background-color: #4CAF50;  
    color: white;  
    padding: 16px 20px;  
    margin: 8px 0;  
    border: none;  
    cursor: pointer;  
    width: 100%;  
    opacity: 0.9;
```

```

}
.registerbtn:hover {
    opacity: 1;
}
</style>
<title>Employee Registration Form</title>
</head>
<body>
<form>
    <div class="container">
        <center> <h1> Registration Form </h1> </center>
        <hr>
        <label for="Name"><b>Name</b></label>
        <input type="text" name="name" placeholder= " Enter Name" size="15" required />

        <div>
            <label>
                <label for="gender"><b>Gender</b></label>
            </label><br>
            <input type="radio" value="Male" name="gender" checked > Male
            <input type="radio" value="Female" name="gender"> Female
            <input type="radio" value="Other" name="gender"> Other

        </div>

        <label>
            <label for="phone"><b>Phone No:</b></label>
        </label>

        <input type="text" name="phone" placeholder="phone no." size="10"/ required>

```

```

<label for="address"><b>Address</b></label>
<textarea cols="80" rows="3" placeholder="Current Address" value="address"
required>

</textarea>
<label for="pin"><b>Pin Code</b></label>
    <input type="text" placeholder="Enter Pin" name="pin" required>
<label for="email"><b>Email</b></label>
<input type="email" placeholder="Enter Email" name="email" required/>

    <label for="city"><b>City</b></label>
    <input type="text" placeholder="Enter City Name" name="city" required>

    <label for="state"><b>State</b></label>
    <input type="text" placeholder="Enter State Name" name="state" required>
    <button type="submit" class="registerbtn">Register</button>
</form>
</body>
</html>

```

Program 11: Create an html page and jump in the specific section of the page for avoiding scrolling.

```

<!DOCTYPE html>
<html>
    <head>
        <title>Ass1_11</title>

    </head>

```

```

<body>
  <h2 id="Lorem Ipsum">Teerthanker Mahaveer University</h2>
  <p class="main-content">
    Welcome to the world's best University.
  </p>
  <p style="padding-bottom: 20px;" >Go to the
    <a href="#bottom">bottom</a>.
  </p>
  <center><h2 id="bottom"style="padding-top: 1000px;" >About us </h2></center>
  <p style="text-align: center;" > Lorem ipsum dolor sit amet consectetur adipisicing
elit. </p>
  <center><p>Move to <a href="#Lorem Ipsum">top</a> </p></center>
</body>
</html>

```

Program 12: Create an html page and take text field and password field.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .button {
      position: absolute;
      left: 120px;

    }
  </style>

```

```
</style>

</head>
<body>
  <form>
    <label>Username: <input type="text"></label> <br><br>
    <label>Password: <input type="password"></label> <br><br>

    <button class="button">Submit</button>
  </form>
</body>
</html>
```

Program 13: Create an html page and display different types of header available in html for the Text like Teerthanker Mahaveer University.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Ass1_13</title>
</head>
<body>
  <center><h1>Teerthanker Mahaveer University</h1></center>
  <center><h2>Teerthanker Mahaveer University</h2></center>
  <center><h3>Teerthanker Mahaveer University</h3></center>
```

```

<center><h4>Teerthanker Mahaveer University</h4></center>
<center><h5>Teerthanker Mahaveer University</h5></center>
<center><h6>Teerthanker Mahaveer University</h6></center>

</body>
</html>

```

Program 14: Create an html page that has marquee as TEERTHANKER MAHAVEER UNIVERSITY. When we hold mouse over this marquee then the moving text is stopped and show marquee movement as horizontal as well as vertical direction

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <div style="height: 250px;">
    <marquee onmouseover="this.stop();" onmouseout="this.start();">
      Teerthanker Mahaveer University (hover mouse to stop me)
    </marquee>
  </div>

  <div> <marquee align="center" height="200" width="500" direction="up"
onmouseover="this.stop();" onmouseout="this.start();">
    Teerthanker Mahaveer University (hover mouse to stop me)</marquee>

```

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

Program 15:

Create a html page for creating website of TMU			
THIS IS HEADER AND WILL SHOW IMAGE OF TMU			
<u>HOME</u>	<u>ABOUT US</u>	<u>CONTACT US</u>	<u>COURSES OFFERED</u>
<p>WELLCOM TO THE HOME PAGE OF TEERTHANKER MAHAVEER UNIVERSITY MORADABAD</p> <p>Theerthanker Mahaveer university India's top best private university in India.</p>			
COPYRIGHT@TMU			

Program 15: Create an html page for creating website of TMU.

```
<html>
  <head>
    <title>
      Ass1-15 </title>
    </head>
  <body>
    <fieldset>
      <table border=1 width=100% cell-padding=12>
        <tr>
          <td colspan="4" align="center">
            TMU Logo
          </td> </tr>
        <tr>
          <th> HOME </th>
          <th> ABOUT US </th>
          <th> CONTACT US </th>
          <th> COURSES OFFERED </th>
        </tr>
      </table> <br> <br>
      <p> Welcome to the home page of Teerthanker Mahaveer
        University Moradabad </p>
      <p> Teerthanker Mahaveer University India's top best private
        university in India </p>
      <center><p> Copyright © TMU </p>
    </fieldset>
  </body>
</html>
```

25/10/21

Program 16:

Create a Form having two boxes with labels as FirstName and LastName. The User should not be allowed to enter the names directly in the text boxes. The input has to be given in the prompt box and then entered values should be given in the text boxes.

```
<!DOCTYPE html >
<HTML>
<HEAD>
<TITLE> New Document </TITLE>
<style>
    label.exe{
        padding-left: 80px;
    }
</style>
<script type="text/javascript">

    function init(){
        getName();

    }

    function getName(){
        var nameForm=document.frm;
        var name=prompt("user first name","");
        if(name != null && name!=""){

            nameForm.fname.value=name;
        }
        var nameForm=document.frm;
        var lname=prompt("user last name","");
```

```

        if(lname != null && lname!=""){

            nameForm.lname.value=lname;

        }

    }

</script>

</HEAD>
<BODY onload="init()">
    <center><p>Getting input from prompt box and display in textbox</p></center>
    <form name="frm">
        <label class="exe" for="FirstName"><b>FirstName : </b></label>
            <input class="exe" type="text" name="fname"/> <br> <br>
        <label class="exe" for="LastName"><b>LastName : </b></label>
            <input class="exe" type="text" name="lname" >
        </form>
</BODY>
</HTML>

```

Program 17:

Create a Web Page that has a button in the centre of the page. Using mouse events change the Message in the status bar.

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">

```

```

<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<style>
    .container {
        text-align: center;

width: 300px;
height: 200px;
padding-top: 300px;
padding-left: 500px;
    }
</style>
</head>
<body>
    <div class="container" >
        <center> <button onmouseover="window.status='Status Changed'; return true;"
            >click me</button></center>

    </div>
</body>
</html>

```

Program 18:

Design a Web page that accepts UserName and Password. Opens a new window when the password corresponds to a particular value is set by the developer

```

<html>
<head>
<title>
Login page
</title>

```

```

<style>
    label.exe{
        padding-left: 80px;
    }
    .button {
position: absolute;
left: 220px;

}

</style>
<script >
    function check(form)
    {

        if( form.pass.value == "12345678")
        {
            window.open("Ass1_18(validation).html")
        }
        else
        {
            alert("Incorrect Password")
        }
    }
</script>
</head>
<body>
<p>Moving to Next Page - Password validation</p>
<form name="login">
    <label class="exe" for="FirstName"><b>UserName : </b></label>

```

```
<input autofocus type="text" name="name" size="25" required /> <br><br>
<label class="exe" for="LastName"><b>Password : </b></label>
<input type="password" name="pass" size="25" required /> <br> <br>
<input class="button" type="button" onclick="check(login)" value="Submit
Query"/>
</form>

</body>
</html>
```

Ass1_18(validation).html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <center><h1>welcome To the University!</h1></center>
</body>
</html>
```

Program 19:

Design a Web page that consists of 2 text boxes. When the page is first loaded set the focus to the first textbox. The user should not be allowed to leave the box unless enters a value in it

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>

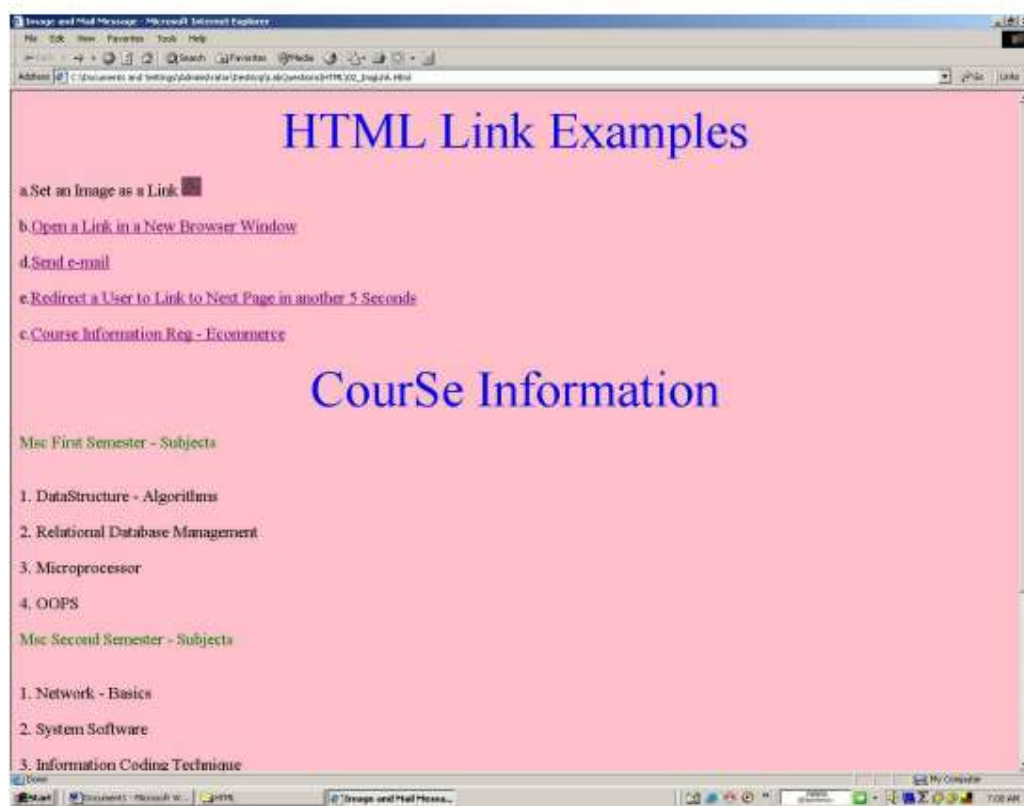
  <style>
    label.exe{
      padding-left: 80px;
    }
    .button {
position: absolute;
left: 220px;

}

  </style>
</head>
<body >
  <label class="exe" for="FirstName"><b>FirstName : </b></label>
  <input autofocus type="text" name="name" id="txt1" size="25" required />
<br><br>
  <label class="exe" for="LastName"><b>LastName : </b></label>
```

```
<input type="text" name="name2" size="25" required  
onfocus="myFunction(document.getElementById('txt1').value)" /> <br> <br>  
<button class="button" > Submit Query</button>  
<script>  
    function myFunction(inputtx)  
{  
    if (inputtx.length == 0)  
    {  
        alert("FNmae textbox should not be empty");  
        return false;  
    }  
    return true;  
}  
</script>  
</body>  
</html>
```

Program 20:



```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <title>Html Links</title>
```

```
  <script>
```

```
    setTimeout(function(){
```

```
      window.location.href = 'https://www.tutorialspoint.com/javascript/';
```

```
    }, 5000);
```

```
  </script>
```

```
</head>
```

```
<body>
```



```

<center><h1 style="color: blue;" > HTML Link Examples</h1></center>
<div>
    <a href="#"></a>
</div>

    <a href="https://tmu.ac.in/" target="_blank"> b. Open a Link in a new browser
window</a> <br>
    <a href="mailto: djain01012002@gmail.com?subject=Mail from Divyanshu jain"
target="_blank"> c.Send Email</a> <br>

    <a href="javascript:setTimeout;"> d. Redirect a user to link to next page in another
5 sec</a> <br>
    <a href="#course;"> e.Course Information reg-Ecommerce</a> <br>
<div>
    <center><h1 id="course" style="color: blue;" >Course Information</h1></center>
    <p style="color: green;">Msc First Semester-Subjects</p> <br>
    <p>1.DataStructure- Algorithms</p>
    <p>2.Relational Database Management</p>
    <p>3.Microprocessor</p>
    <p>4.OOPS</p>
    <p style="color: green;">Msc Secondt Semester- Subjects</p> <br>
    <p>1.Network-Basics</p>
    <p>2.System Software</p>
    <p>3.Information Coding Technique</p>

</div>

</body>
</html>

```

Program 21:

Create HTML page with form tag with following input elements Name, Address, Mobile No. and submit button .Write php program to print html form value with \$_POST variable.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <form action = "action2.php" method = "POST">
        Name: <input type = "text" name = "name" /> <br> <br>
        Address: <input type="text" name="Address"> <br> <br>
        Phone No: <input type="number" name="Phone"> <br> <br>
        <input type = "submit" />
    </form>
</body>
</html>
```

Action2.php:

```
<?php
if( $_POST["name"] || $_POST["Address"]|| $_POST["Phone"] ) {

    echo "Name is ". $_POST['name']. "<br />";
    echo "Address is ". $_POST['Address']. "<br/>";
```

```
    echo "phone No. is ". $_POST['Phone'];  
    exit();  
}  
?>
```

Program 22:

Create HTML page with form tag with following input elements Name, Address, Mobile No. and submit button .Write php program to print html form value with \$_GET variable

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
    <meta charset="UTF-8">  
    <meta http-equiv="X-UA-Compatible" content="IE=edge">  
    <meta name="viewport" content="width=device-width, initial-scale=1.0">  
    <title>Document</title>  
</head>  
<body>  
    <form action = "action.php" method = "GET">  
        Name: <input type = "text" name = "name" /> <br> <br>  
        Address: <input type="text" name="Address"> <br> <br>  
        Phone No: <input type="number" name="Phone"> <br> <br>  
        <input type = "submit" />  
    </form>  
</body>  
</html>
```

Action.php:

```
<?php
    if( $_GET["name"] || $_GET["Address"]|| $_GET["Phone"] ) {
        echo "Name is ". $_GET['name']. "<br />";
        echo "Address is ". $_GET['Address']. "<br/>";
        echo "phone No. is ". $_GET['Phone'];

        exit();
    }
?>
```

ASSIGNMENT 2

Program 1: WCP to display a message "HELLO INDIA" on console.

using System;

```
namespace Ass2__
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Hello World!");
        }
    }
}
```

Output :

Hello World

Program 2: WCP to perform arithmetic operation.

using System;

```
namespace Ass2_2
{
    class Program
    {
        static void Main(string[] args)
        {
            int a = 50, b = 25;
            Console.WriteLine(a + b);
            Console.WriteLine(a - b);
        }
    }
}
```

```

        Console.WriteLine(a * b);
        Console.WriteLine(a / b);

    }
}
}

```

Output:

```

75
25
1250
2

```

Program 3: WCP to find weather a year is leap or not.

```

using System;

namespace Ass2_3
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Year : ");
            int Year = int.Parse(Console.ReadLine());
            if (((Year % 4 == 0) && (Year % 100 != 0)) || (Year % 400 == 0))
                Console.WriteLine("{0} is a Leap Year.", Year);
        }
    }
}

```

```

        else Console.WriteLine("{0} is not a Leap Year.", Year);
        Console.ReadLine();
    }
}
}

```

Output:

Enter Year :

2000

2000 is a Leap Year.

Program 4: WCP to find the grades of a student according to their scores.

```
using System;
```

```
namespace Ass2_4
```

```

{
    class Program
    {
        static void Main(string[] args)
        {
            string[] studentId = { "STU01", "STU02", "STU03", "STU04", "STU05" };
            int[] marks = { 76, 83, 92, 65, 34 };
            Console.WriteLine("Finds the grade for each student");
            for (int i = 0; i < studentId.Length; i++)
            {
                if (marks[i] > 90)
                {
                    Console.WriteLine(studentId[i] + " Grade: " + "A");
                }
                else if (marks[i] > 80)

```

```
{
    Console.WriteLine(studentId[i] + " Grade: " + "B");
}
else if (marks[i] > 70)
{
    Console.WriteLine(studentId[i] + " Grade: " + "C");
}
else if (marks[i] > 50)
{
    Console.WriteLine(studentId[i] + " Grade: " + "D");
}
else
{
    Console.WriteLine(studentId[i] + " Grade: " + "FAIL");
}
}
Console.ReadKey();

}
}
}
```

Output:

Finds the grade for each student

STU01 Grade: C

STU02 Grade: B

STU03 Grade: A

STU04 Grade: D

STU05 Grade: FAIL

Program 5: WCP to find factorial using for, while, do...While loops
(Using for loop):

```
using System;

namespace Ass2_5_for
{
    class Program
    {
        static void Main(string[] args)
        {
            int i, fact = 1, number;
            Console.Write("Enter Number: ");
            number = int.Parse(Console.ReadLine());
            for (i = 1; i <= number; i++)
            {
                fact = fact * i;
            }
            Console.Write("Factorial is: " + fact);
            Console.ReadKey();
        }
    }
}
```

Using while loop:

```
using System;

namespace Ass2_5_while
{
```

```

class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("Enter Number: ");
        int n = int.Parse(Console.ReadLine());
        int fact = 1, i = 1;
        while(i<=n)
        {
            fact = fact * i;
            i++;

        }
        Console.WriteLine("Factorial is " + fact);
        Console.ReadKey();

    }

}

```

Using do-while:

using System;

```

namespace Ass2_5
{
    class Program
    {
        static void Main(string[] args)
        {

```

```

        Console.WriteLine(" Enter Number: ");
        int n = int.Parse(Console.ReadLine());
        int i = 1;
        int factorial = 1;
        do
        {
            factorial *= i;
            i++;
        }
        while (i <= n);
        Console.WriteLine("Factorial is : "+ factorial);

        Console.ReadKey();
    }
}

```

Output:

Enter Number:

5

Factorial is : 120

Program 6: WCP to print table from 1-10.

```
using System;
```

```
namespace Ass2_6
```

```
{
    class Program
```

```

{
    static void Main(string[] args)
    {
        for (int table = 1; table <= 10; table++)
        {
            for (int i = 1; i <= 10; i++)
            {
                Console.WriteLine(table + " * " + (i) + " = " + (table * (i)));
            }
            Console.WriteLine("-----");
        }
    }
}

```

Output:

```

1 * 1 = 1
1 * 2 = 2
1 * 3 = 3
1 * 4 = 4
1 * 5 = 5
1 * 6 = 6
1 * 7 = 7
1 * 8 = 8
1 * 9 = 9
1 * 10 = 10
-----
2 * 1 = 2
2 * 2 = 4

```

$$2 * 3 = 6$$

$$2 * 4 = 8$$

$$2 * 5 = 10$$

$$2 * 6 = 12$$

$$2 * 7 = 14$$

$$2 * 8 = 16$$

$$2 * 9 = 18$$

$$2 * 10 = 20$$

$$3 * 1 = 3$$

$$3 * 2 = 6$$

$$3 * 3 = 9$$

$$3 * 4 = 12$$

$$3 * 5 = 15$$

$$3 * 6 = 18$$

$$3 * 7 = 21$$

$$3 * 8 = 24$$

$$3 * 9 = 27$$

$$3 * 10 = 30$$

$$4 * 1 = 4$$

$$4 * 2 = 8$$

$$4 * 3 = 12$$

$$4 * 4 = 16$$

$$4 * 5 = 20$$

$$4 * 6 = 24$$

$$4 * 7 = 28$$

$$4 * 8 = 32$$

$$4 * 9 = 36$$

$$4 * 10 = 40$$

$$5 * 1 = 5$$

$$5 * 2 = 10$$

$$5 * 3 = 15$$

$$5 * 4 = 20$$

$$5 * 5 = 25$$

$$5 * 6 = 30$$

$$5 * 7 = 35$$

$$5 * 8 = 40$$

$$5 * 9 = 45$$

$$5 * 10 = 50$$

$$6 * 1 = 6$$

$$6 * 2 = 12$$

$$6 * 3 = 18$$

$$6 * 4 = 24$$

$$6 * 5 = 30$$

$$6 * 6 = 36$$

$$6 * 7 = 42$$

$$6 * 8 = 48$$

$$6 * 9 = 54$$

$$6 * 10 = 60$$

$$7 * 1 = 7$$

$$7 * 2 = 14$$

$$7 * 3 = 21$$

$$7 * 4 = 28$$

$$7 * 5 = 35$$

$$7 * 6 = 42$$

$$7 * 7 = 49$$

$$7 * 8 = 56$$

$$7 * 9 = 63$$

$$7 * 10 = 70$$

$$8 * 1 = 8$$

$$8 * 2 = 16$$

$$8 * 3 = 24$$

$$8 * 4 = 32$$

$$8 * 5 = 40$$

$$8 * 6 = 48$$

$$8 * 7 = 56$$

$$8 * 8 = 64$$

$$8 * 9 = 72$$

$$8 * 10 = 80$$

$$9 * 1 = 9$$

$$9 * 2 = 18$$

$$9 * 3 = 27$$

$$9 * 4 = 36$$

$$9 * 5 = 45$$

$$9 * 6 = 54$$

$$9 * 7 = 63$$

$$9 * 8 = 72$$

$$9 * 9 = 81$$

$$9 * 10 = 90$$

$$10 * 1 = 10$$

$$10 * 2 = 20$$

$$10 * 3 = 30$$

$$10 * 4 = 40$$

10 * 5 = 50
10 * 6 = 60
10 * 7 = 70
10 * 8 = 80
10 * 9 = 90
10 * 10 = 100

Program 7: WCP to perform various string operations.

```
using System;
```

```
namespace Ass2_7
```

```
{
```

```
    class Program
```

```
    {
```

```
        static void Main(string[] args)
```

```
        {
```

```
            string a,b;
```

```
            a = "Divyan shu";
```

```
            b = "Divyanshujain";
```

```
            Console.WriteLine(a.Clone());
```

```
            // Make String Clone
```

```
            Console.WriteLine(a.CompareTo(b));
```

```
            //Compare two string value
```

```
            Console.WriteLine(a.Contains("shu")); //Check whether specified value exists  
or not in string
```



```
Console.WriteLine(a.EndsWith("u")); //Check whether specified value is the  
last character of string
```

```
Console.WriteLine(a.Equals(b));  
//Compare two string and returns true and false
```

```
Console.WriteLine(b.IndexOf("a")); //Returns the first index position of  
specified value
```

```
Console.WriteLine(a.ToLower());  
//Covert string into lower case
```

```
Console.WriteLine(a.ToUpper());  
//Convert string into Upper case
```

```
Console.WriteLine(a.Insert(0, "Hello")); //Insert substring into string
```

```
Console.WriteLine(a.Length);  
//Returns the Length of String
```

```
Console.WriteLine(a.Substring(2, 5));  
//Returns substring
```

```
Console.WriteLine(a.ToCharArray());  
//Converts an string into char array.
```

```
Console.WriteLine(a.Trim());  
//It removes starting and ending white spaces from
```

```
    }  
  }  
}
```

Output:

Divyan shu

-1

True

True

False

4

divyan shu

DIVYAN SHU

HelloDivyan shu

10

vyan

Divyan shu

Divyan shu

Program 8: WCP to identify choice of user using select...Case.

using System;

namespace Ass2_8

```
{  
    class Program  
    {
```

```
static void Main(string[] args)
{
    char op;
    double first, second, result;

    Console.Write("Enter first number: ");
    first = Convert.ToDouble(Console.ReadLine());
    Console.Write("Enter second number: ");
    second = Convert.ToDouble(Console.ReadLine());
    Console.Write("Enter operator (+, -, *, /): ");
    op = (char)Console.Read();

    switch (op)
    {
        case '+':
            result = first + second;
            Console.WriteLine(result);
            break;

        case '-':
            result = first - second;
            Console.WriteLine(result);
            break;

        case '*':
            result = first * second;
            Console.WriteLine(result);
            break;

        case '/':
```

```

        result = first / second;
        Console.WriteLine( result);
        break;

    default:
        Console.WriteLine("Invalid Operator");
        break;

    }
    Console.ReadKey();
}
}
}
}

```

Output:

Enter first number: 23

Enter second number: 45

Enter operator (+, -, *, /): +

68

Program 9: WCP to declare & initialize various types of variables.

```
using System;
```

```
namespace Ass2_9
```

```
{
```

```
    class Program
```

```
    {
```

```
        static void Main(string[] args)
```

```
        {
```

```
            string stringVar = "Hello World!!!";
```

```
            int intVar = 100;
```

```

float floatVar = 10.2f;
char charVar = 'A';
bool boolVar = true;
double doubleVar = 12.25;

Console.WriteLine(stringVar);
Console.WriteLine(intVar);
Console.WriteLine(floatVar);
Console.WriteLine(charVar);
Console.WriteLine(boolVar);
Console.WriteLine(doubleVar);
    }
}
}

```

Output:
Hello World!!

100

10.2

A

True

12.25

Program 10: WCP to find the largest number among three numbers

```
using System;
```

```
namespace Ass2_10
```

```
{
```

```
    class Program
```

```
    {
```

```
static void Main(string[] args)
{

    // set the value of the three numbers
    Console.WriteLine("enter first number: ");
    int num1 = int.Parse(Console.ReadLine());
    Console.WriteLine("enter second number: ");
    int num2 = int.Parse(Console.ReadLine());
    Console.WriteLine("enter third number: ");
    int num3 = int.Parse(Console.ReadLine());

    if (num1 > num2)
    {
        if (num1 > num3)
        {
            Console.WriteLine("Number one is the largest!\n");
        }
        else
        {
            Console.WriteLine("Number three is the largest!\n");
        }
    }
    else if (num2 > num3)
    {
        Console.WriteLine("Number two is the largest!\n");
    }
    else
    {
        Console.WriteLine("Number three is the largest!\n");
    }
}
}
```

Output:

enter first number:

20

enter second number:

10

enter third number:

30

Number three is the largest!

Program 11: WCP to find maximum element in array a of size n.

using System;

namespace Ass2_11

{

class Program

{

static void Main(string[] args)

{

int[] arr = new int[5] { 99, 95, 93, 89, 87 };

int i, max, n;

n = 5;

max = arr[0];

for (i = 1; i < n; i++)

{

if (arr[i] > max)

{

max = arr[i];

}

```

    }
    Console.WriteLine("Maximum element = {0}\n", max);
    Console.ReadKey();

}
}
}

```

Output:

Maximum element = 99

Program12: WCP to find minimum element in array a of size n.

```
using System;
```

```

namespace Ass2_12
{
    class Program
    {
        static void Main(string[] args)
        {
            int[] arr = new int[5] { 99, 95, 93, 89, 87 };
            int i, min, n;

            n = 5;
            min = arr[0];
            for (i = 1; i < n; i++)
            {

```



```

        if (arr[i] < min)
        {
            min = arr[i];
        }
    }

    Console.WriteLine("Minimum element = {0}\n\n", min);
    Console.ReadKey();
}
}
}

```

Output:

Minimum element= 87

Program 13: WCP to find LCM of two number

```
using System;
```

```

namespace Ass1_13
{
    class Program
    {
        static void Main(string[] args)
        {
            int num1, num2, x, y, lcm = 0;

            Console.WriteLine("Enter first number");
            num1 = int.Parse(Console.ReadLine());
            Console.WriteLine("Enter second number");

```

```

        num2 = int.Parse(Console.ReadLine());
        x = num1;
        y = num2;
        while (num1 != num2)
        {
            if (num1 > num2)
            {
                num1 = num1 - num2;
            }
            else
            {
                num2 = num2 - num1;
            }
        }
        lcm = (x * y) / num1;
        Console.WriteLine("Least Common Multiple is : " + lcm);
        Console.ReadKey();
    }
}
}

```

Output:

Enter first number

4

Enter second number

3

Least Common Multiple is : 12

Program14: WCP to find the area of a circle.

```
using System;

namespace Ass2_14
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter radius of circle");
            float r = float.Parse(Console.ReadLine());
            double area = 3.14 * r * r;
            Console.WriteLine("Area is: " + area);
            Console.ReadKey();
        }
    }
}
```

Output:

Enter radius of circle

3

Area is: 28.259999999999998

Program 15: WCP to convert decimal to binary number.

```
using System;

namespace Ass2_15
{
    class Program
```

```

{
    static void Main(string[] args)
    {
        int n, i;
        int[] a = new int[100];
        Console.Write("Enter the number to convert: ");
        n = int.Parse(Console.ReadLine());
        for (i = 0; n > 0; i++)
        {
            a[i] = n % 2;
            n = n / 2;
        }
        Console.Write("Binary of the given number= ");
        for (i = i - 1; i >= 0; i--)
        {
            Console.Write(a[i]);
        }
        Console.ReadKey();
    }
}

```

Output:

Enter the number to convert: 23

Binary of the given number= 10111

Program 16: WCP to swap four numbers without using fifth variable
using System;

namespace Ass2_16

```
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("enter 4 numbers to swap");
            int a = int.Parse(Console.ReadLine());
            int b = int.Parse(Console.ReadLine());
            int c = int.Parse(Console.ReadLine());
            int d = int.Parse(Console.ReadLine());

            a = a + b;
            b = a - b;
            a = a - b;

            // swapping b and c variables
            b = b + c;
            c = b - c;
            b = b - c;

            // swapping c and d variables
            c = c + d;
            d = c - d;
            c = c - d;

            Console.WriteLine("After swapping :");
            Console.WriteLine("a= " + a);
            Console.WriteLine("b= " + b);
            Console.WriteLine("c= " + c);
            Console.WriteLine("d= " + d);
        }
    }
}
```

```
        Console.ReadKey();

    }

}
```

Output:

enter 4 numbers to swap

2

4

5

7

After swapping :

a= 4

b= 5

c= 7

d= 2

Program 17: WCP to sort an array.

```
using System;
```

```
namespace Ass2_17
```

```
{
    class Program
    {
        static void Main(string[] args)
        {
            int[] arr = new int[] { 1, 9, 6, 7, 5, 9 };
        }
    }
}
```

```

int temp;
for (int i = 0; i < arr.Length - 1; i++)

    for (int j = i + 1; j < arr.Length; j++)

        if (arr[i] < arr[j])
        {

            temp = arr[i];
            arr[i] = arr[j];
            arr[j] = temp;
        }

    foreach (int value in arr)
    {
        Console.Write(value + " ");
    }
    Console.ReadKey();
}
}
}

```

Output:

9 9 7 6 5 1

Program 18: WCP to implement function.

```

using System;

namespace Ass2_18
{
    class Program
    {
        public int sum(int a,int b)
        {
            Console.WriteLine("sum is: " + (a + b));
            Console.ReadKey();

            return 0;
        }
        static void Main(string[] args)
        {

            int a = 10, b=20;
            Program program = new Program();
            program.sum(a,b);
        }
    }
}

```

Output:

Sum is: 30

Program 19:

WCP to print

```
*  
* *  
* * *  
* * * *
```

```
using System;
```

```
namespace Ass2_19
```

```
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
  
            for (int i = 1; i <= 5; i++)  
            {  
                for (int j = 1; j <= i; j++)  
                {  
                    Console.Write("* ");  
                }  
                Console.WriteLine();  
            }  
            Console.ReadKey();  
        }  
    }  
}
```

Program 20:

WCP to print

1
12
123
1234

using System;

namespace Ass2_20

```
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            for (int i = 1; i < 5; i++)  
            {  
                for (int j = 1; j <= i; j++)  
                    Console.Write(j.ToString());  
                Console.WriteLine();  
            }  
        }  
    }  
}
```

Program 21:

WCP to print

1
21
321
4321

```
using System;

namespace Ass2_21
{
    class Program
    {
        static void Main(string[] args)
        {
            int i, j, k;
            for (i = 1; i < 5; i++)
            {
                for (k = 5 - i; k > 0; k--)
                {
                    Console.Write(" ");
                }
                for (j = i; j >= 1; j--)
                {
                    Console.Write(j);
                }
                Console.WriteLine();
            }
        }
    }
}
```

Program 22:

WCP to print

```
1
22
333
4444
```

```
using System;
```

```
namespace ass2_22
```

```
{
```

```
    class Program
```

```
    {
```

```
        static void Main(string[] args)
```

```
        {
```

```
            int i, j, k;
```

```
            for (i = 1; i < 5; i++)
```

```
            {
```

```
                for (k = 5 - i; k > 0; k--)
```

```
                {
```

```
                    Console.Write(" ");
```

```
                }
```

```
                for (j = i; j >= 1; j--)
```

```
                {
```

```
                    Console.Write(i);
```

```
                }
```

```
                Console.WriteLine();
```

```

    }
}
}
}

```

Program 23:

WCP to print

```

1
1 8
1 8 27
1 8 27 64

```

```
using System;
```

```
namespace Ass2_23
```

```

{
    class Program
    {
        static void Main(string[] args)
        {
            for (int i = 1; i <5; i++)
            {
                for(int j=1;j<=i;j++)
                {
                    Console.Write(j * j * j );
                    Console.Write(" ");
                }
                Console.WriteLine();
            } } } }

```

