INDIAN INSTITUTE OF INFORMATION TECHNOLOGY SONEPAT

APPLICATION PROGRAMMING LAB FILE

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Problem 1
Creating HTML Web Page Forms

Procedure

1.Create the basic HTML structure, which contains one main division or container.

2. Divide this into two further divisions, viz. Top and bottom.

3. In top write basic info about yourself.

4. Between top and bottom divisions we write heading of our web page/form.

5. Divide the bottom section further into bottom left and bottom right.

6. In bottom left section we create a form using the Form tag and input elements.

7. To make our page more nice looking we write some Dummy Text in bottom right side.

Code

```
<!DOCTYPE html>
<html>
<head>
        <title>Form</title>
</head>
<body>
        <h1>Registration Form</h1>
        <form>
                <label for="first">First Name:</label>
                <input id="first" type="text" name="first name" placeholder="John" required>
                <label for="second">Last Name:</label>
                <input id="second" type="text" name="last name" placeholder="Smith" required>
```

```html
            <br>
            <label for="male">Male</label>
            <input id="male" type="radio" name="Gender" value="Male">
            <label for="female">Female</label>
            <input id="female" type="radio" name="Gender" value="Female">
            <label for="other">Others</label>
            <input id="other" type="radio" name="Gender" value="Other">
            <br>
            <label for="email">Email:</label>
            <input id="email" type="email" name="Email" required>
            <label for="pass">Password:</label>
            <input id="pass" type="password" name="Password" pattern=".{8,12}" required
title="5 to 10 Characters">
            <br>
            <label>Address:<br>
                    <textarea rows="2" cols="20">Enter your address.</textarea></label>
                    <br>
            <label >Date of Birth:
                    <input type="date" name="dob">
            </label>
            <br>
            <label>Photo:
                    <input type="file" name="image">
            </label>
            <br>
            <label>I agree to the terms and conditions
            <input type="checkbox" required></label>
            <br>
            <input type="Submit" >
        </form>
</body>
</html>
```

Output:

Problem 2
Creating Home Page using HTML

Procedure

1. Creating a home page for a website of E-Learning.

2. Create a Heading for a website.

3. Make few tab buttons like home, about, downloads etc.

4. Write few contents in a paragraph tab.

5. Create anchor tab for hyperlinks to other websites.

Code

```html
 <!DOCTYPE html>
<html>
<head>
        <title>Web Page</title>
</head>
<body>
        <div><center>
                <h1>Just a Web Page.</h1>
        </center></div>
        <div>
                <button>Home</button>
                <button>About</button>
                <button>Contact</button>
                <button>Download</button>
        </div>
        <h2>Lorem Ipsum</h2>
        <p>
                Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
                tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,
                quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo
                consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
                cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non
                proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
        </p>
        <p>
```

Aliquam ut nunc volutpat, tincidunt lorem nec, finibus quam. Vestibulum ante ipsum primis in

faucibus orci luctus et ultrices posuere cubilia Curae; Nullam pulvinar ligula et urna viverra

faucibus. Sed sed est ultrices, ornare lacus lobortis, elementum ante. Quisque

tristique arcu auctor

lectus aliquet porttitor. Aliquam imperdiet cursus orci eu dapibus. Vestibulum enim

purus, lacinia

eget dapibus dictum, rhoncus in neque. Curabitur tincidunt faucibus finibus.

</p>

Go to Url:

Lorem Ipsum

</body>

</html>

Output:

Problem 3

Creating XHTML and CSS and understanding it's use in creating web pages.

Procedure

1.Create the basic HTML structure, which modification in doc type.

2.Create body tag and write contents.

3.Create a list tag with google and facebook as websites.

4. Add appropriate CSS with background and heading colour.

Code

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transition.dtd">
<html>
<head>
<title>
Web sites
</title>
<style>
body {
margin-left: 10%;
margin-top: 1em;
margin-right: 10%;
background: Grey;
}
h1 {
font-family: Arial, sans-serif;
color: #14670;
border-bottom: thin dotted black;
}
li {
margin-top: 1em;
font-size: 1.25em;
}
ul {
list-style-type: none;
}
a {
```

```
text-decoration: none;
}
a:link, a:visited {
color: blue;
}
a:hover {
color: white;
text-decoration: underline;
background: blue;
}
img {
border: thin solid black;
}
</style>
</head>
<body>
<h1>
Web sites
</h1>
<ul>
<li>
<a href="http://www.google.com.edu/">
Google
</a>
</li>
<li>
<a href="http://www.facebook.com/">
Facebook
</a>
</li>
</ul>
</body>
</html>
```

Output:
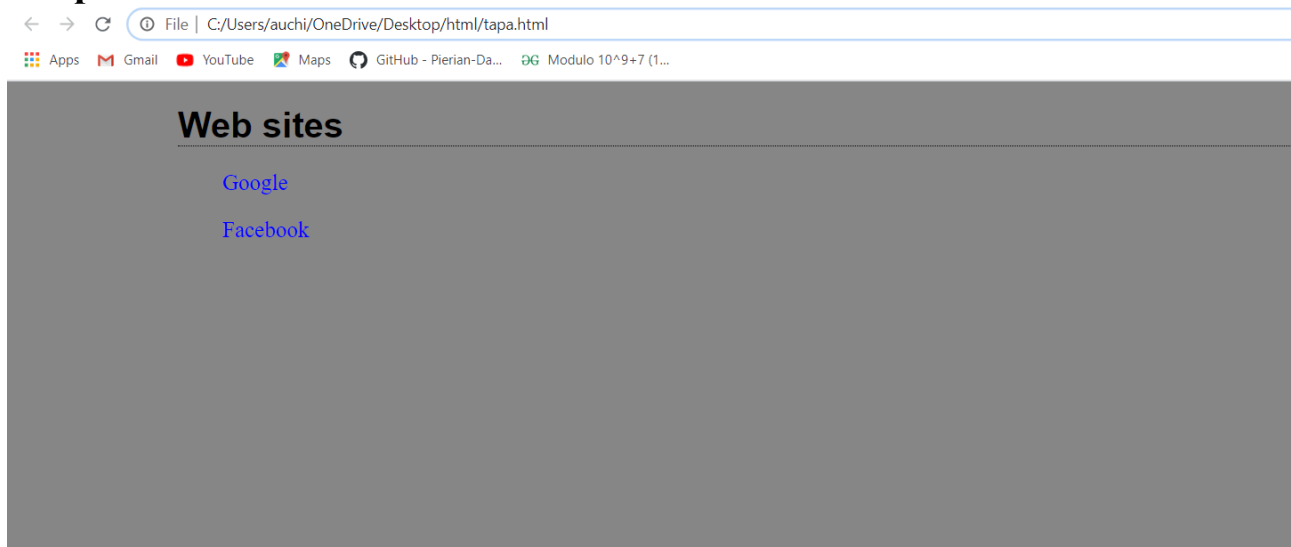
Problem 4
Setting up and configuration of XAMPP server.

Procedure

1. Open XAMPP after installation and click on general tab in the navigation menu.

2. Click on the start option to start the XAMPP server. A green light would appear in the top right side of the application, it means XAMPP has been successfully started in your computer.

3. Go to services tab in the navigation menu and click on start all at bottom.

4. Red light would become green in Apache, MySQL, and ProFTPD, which means all the service shave been started successfully.

5. Go to network tab in navigation menu and enable localhost servers.

6. You can now mount the volumes from the volumes tab in navigation menu, to see all your files in a file explorer in your pc.

Output:

Problem 5
Understanding PHP

Procedure

1.Create the basic HTML structure with title prime check.

2. In PHP tag take a variable $num to check for prime.

3. Apply the necessary if-else condition for checking for prime.

4. Print the result using echo.

Code

```
<html>
<head>
<title>Prime check</title>
</head>
<body>
<?php
$num=8;
if ($num==1)
echo "Neither prime nor composite<br>";
else
{
$t=0;
for ( $i=2 ; $i<$num ; $i++ ){
if ($num%$i==0)
$t++;
}
if ($t==0)
echo "Prime Number<br>";
else
echo "Not Prime<br>";
}
?>
</body>
</html>
```

Output:

Not Prime

Problem 6
Creating registration form using PHP.

Procedure

1.Create the basic HTML structure with title CodeBook.

2. Create the main container. Put a form tag inside it.

3. Write different input elements, and add proper validation using HTML tables.

4. Add adequate PHP for server side scripting and validation.

5. Echo appropriate message on successful registration.

Code

```
<!DOCTYPE html>
<html>
<head>
 <title>Visitor Counter</title>
 <link href="css/bootstrap.min.css" rel="stylesheet">
 <style type="text/css">
 .wrapper{
 height:300px;
 width: 300px;
 background-color: skyblue;
 margin: auto;
 text-align: center;
 border: 1px solid white;
 box-shadow: 2px 2px 10px gray;
 margin-top: 50px;
 }
 h1
 {
 background-color: mediumseagreen;
 color: white;
 border-bottom: 2px solid white;
 }
 h1,h3
 {
 padding: 20px;
```

```
    font-size: 5em;
    }
    body
    {
    background-color: #0f101a;
    }
    </style>
</head>
<body>
<div class="heading">
 <h1>Web Page Visitor Counter</h1>
 </div>
<div class="wrapper">
<h1 >
 Visitor Count
 </h1>
 <h3>
 <?php
 session_start();
 $counter_name = "counter.txt";
 // Check if a text file exists.
 //If not create one and initialize it to zero.
 if (!file_exists($counter_name)) {
 $f = fopen($counter_name, "w");
 fwrite($f,"0");
 fclose($f);
 }
 $f = fopen($counter_name,"r");
 $counterVal = fread($f, filesize($counter_name));
 fclose($f);
 if(!isset($_SESSION['hasVisited'])){
 $_SESSION['hasVisited']="yes";
 $counterVal++;
 $f = fopen($counter_name, "w");
 fwrite($f, $counterVal);
 fclose($f);
 echo $counterVal;
 }
 echo $counterVal;
 ?>
</h3>
</div>
</body>
</html>
```

Output:

Web Page Visitor Counter

Visitor Count

3
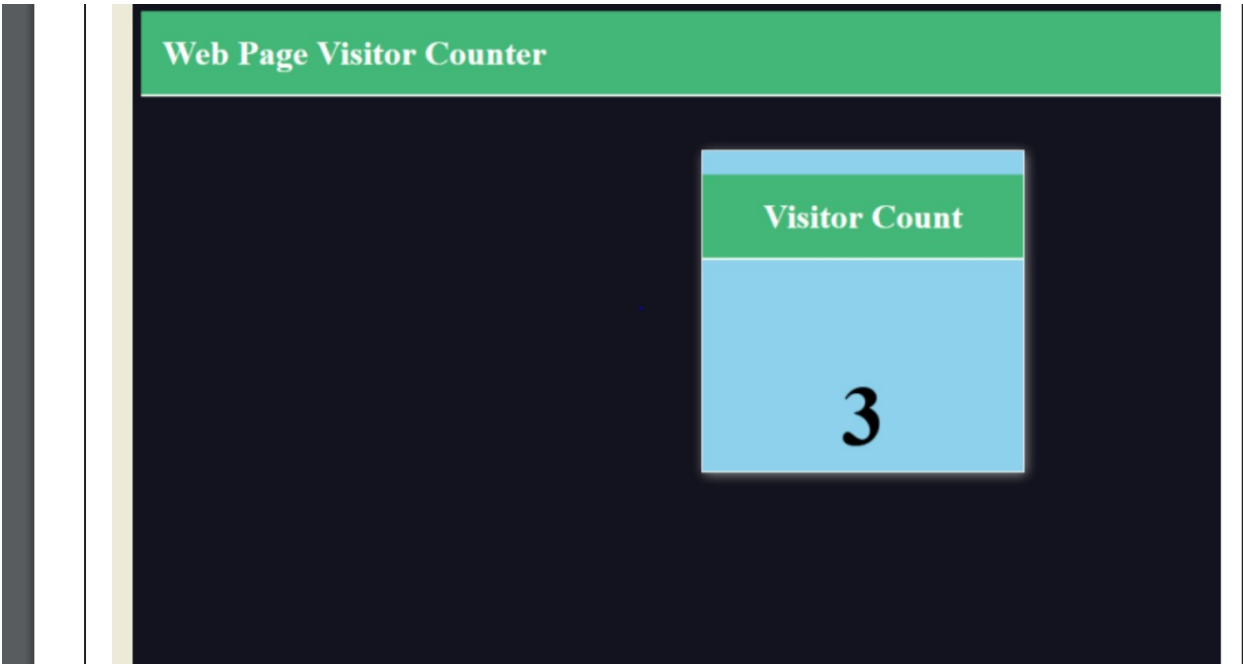
Problem 7
Understanding JavaScript

Procedure

1.Create the basic HTML structure with script tag in head of the page.

2. Create two functions, viz. over and out, for mouse over and mouse out respectively.

3. Create a heading and further create a division, write some contents inside this division.

4. In the div tag write events mouseover and mouseout and equal them to the corresponding functions.

Code

```
<html>
<head>
<script>
function over()
{
document.write("Over");
}
function out()
{
document.write("Out");
}
</script>
</head>
<body>
<p>Bring your mouse in this division</p>
<div onmouseover="over()" onmouseout="out()">
<h2>This is inside the division</h2>
</div>
</body>
</html>
```

Output:

Before mouse over

Bring your mouse in this division

This is inside the division

On mouse over

Over

Problem 8
Creating a Web page with back end in PHP and front end in JavaScript.

Procedure

1. Create the basic HTML structure with title Art Gallery.

2. In the body section create a form element. All our page content would be inside this tag.

3. Create a division named header and write the heading of the web page.

4. Next create a division named search box and create an input element in which user can search for any element in the gallery. Add adequate JS code in the head section of the file.

5. Next write Art gallery elements in a table and apply proper CSS styling in the head section of the file.

Code

```
<!DOCTYPE html>
<html>
<head>
        <title>GENERAL INFORMATION</title>
</head>
<style type="text/css">
        body{
        font-family: Roboto;
        background-color: #bdc3c7;
        margin-left:100px;
}
</style>
<body>
        <h1> General Information</h1>
        <centre><form name="form" action="form.php" method="post" onsubmit="return validateForm()
        " >
<label><h3>Firstname :</label><input type="textbox" name="Firstname" required="please type name"></h3>
```

```html
<label><h3>Lastname :</label><input type="textbox" name="lastname" required="please type name"></h3>

<h3><label>Gender     :</label><label>Male</label><input type="radio" name="gender" value="Male">Female</label><input type="radio" name="gender" value="Female"></h3>
<h3><label>Fathers's Name    :</label><input type="text" name="fname" required="please type name"></h3>
<h3><label>Mother's Name    :</label><input type="text" name="mname" required="please type name"></h3>



<h3><label>State         :</label>
<select name="state" >
        <option value="0">Select</option>
<option value="Andhra Pradesh">Andhra Pradesh</option>
<option value="Andaman and Nicobar Islands">Andaman and Nicobar Islands</option>
<option value="Arunachal Pradesh">Arunachal Pradesh</option>
<option value="Assam">Assam</option>
<option value="Bihar">Bihar</option>
<option value="Chandigarh">Chandigarh</option>
<option value="Chhattisgarh">Chhattisgarh</option>
<option value="Dadar and Nagar Haveli">Dadar and Nagar Haveli</option>
<option value="Daman and Diu">Daman and Diu</option>
<option value="Delhi">Delhi</option>
<option value="Lakshadweep">Lakshadweep</option>
<option value="Puducherry">Puducherry</option>
<option value="Goa">Goa</option>
<option value="Gujarat">Gujarat</option>
<option value="Haryana">Haryana</option>
<option value="Himachal Pradesh">Himachal Pradesh</option>
<option value="Jammu and Kashmir">Jammu and Kashmir</option>
<option value="Jharkhand">Jharkhand</option>
<option value="Karnataka">Karnataka</option>
<option value="Kerala">Kerala</option>
<option value="Madhya Pradesh">Madhya Pradesh</option>
<option value="Maharashtra">Maharashtra</option>
<option value="Manipur">Manipur</option>
<option value="Meghalaya">Meghalaya</option>
<option value="Mizoram">Mizoram</option>
<option value="Nagaland">Nagaland</option>
<option value="Odisha">Odisha</option>
<option value="Punjab">Punjab</option>
<option value="Rajasthan">Rajasthan</option>
<option value="Sikkim">Sikkim</option>
<option value="Tamil Nadu">Tamil Nadu</option>
<option value="Telangana">Telangana</option>
<option value="Tripura">Tripura</option>
<option value="Uttar Pradesh">Uttar Pradesh</option>
<option value="Uttarakhand">Uttarakhand</option>
<option value="West Bengal">West Bengal</option>
</select></h3>
```

```html
<h3><label>City    :</label><input type="text" name="city"
required=""></h3>
<h3><label>E-mail Id:</label><input type="textbox" name="E-mail"></h3>
        <h3><label><input type="checkbox" name="agree" required="">I here by declare that all
the information provided above are correct with my best knowledge</label></h3>
        <input type="submit" >
        </form></center>
        <script type="text/javascript">
                function validateForm() {
  var text = document.forms["form"]["Firstname"].value;
  if (text == "") {
    alert("Name must be correct");
    return false;
  }
 var expression = /^[a-zA-Z]+$/;
  if(expression.test(text)==false){
alert("Enter a valid name ");
return false;
}
  text = document.forms["form"]["lastname"].value;
  if (text == "" ) {
    alert("Name must be correct");
    return false;
  }
  if(expression.test(text)==false){
alert("Enter a valid name ");
return false;}
text = document.forms["form"]["fname"].value;
  if (text == "" ) {
    alert("Name must be correct");
    return false;
  }
  if(expression.test(text)==false){
alert("Enter a valid name ");
return false;}
text = document.forms["form"]["mname"].value;
  if (text == "" ) {
    alert("Name must be correct");
    return false;
  }
  if(expression.test(text)==false){
alert("Enter a valid name ");
return false;}
text = document.forms["form"]["city"].value;
  if (text == "" ) {
    alert("City name must be correct");
    return false;
  }
  if(expression.test(text)==false){
alert("Enter a valid  City name ");
return false;}
```

```
text = document.forms["form"]["number"].value;
  if (x == "" ) {
    alert(" Enter contact number");
    return false;
  }
  var emailexp=/^[0-9]+$/;
  if(emailexp.test(text)==false){
alert("Enter a valid number ");
return false;
}
if(x.length!==10)
{
        alert("number must be of 10 digit");
        return false;
}
var r= /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/;

text = document.forms["form"]["E-mail"].value;
 if(r.test(x)==false){
alert("Enter a valid E-mail ");
return false;
}
text = document.forms["form"]["state"].value;
 if(x===0 || x==='){
alert("Select the state");
return false;
}

text= document.forms["form"]["gender"].value;
 if(text===0 || text==='){
alert("Select the gender");
return false;
}


}
        </script>
</body>
</html>

PHP Validation:
<!DOCTYPE html>
<html>
<head>
  <title>Your Info</title>
</head>
<style type="text/css">
body{
  background: #2BC0E4;

  font-family: Roboto;
```

```
}
</style>
<body>


<?php
echo("<h1>Your information is successfully submitted</h1><br>");
echo("<h1>Review it");
echo("<h1>Name=".$_POST["Firstname"]." ".$_POST["lastname"]."</h1><br>");
echo("<h1>FAther's Name=".$_POST["fname"]."</h1><br>");
echo("<h1>Mother's Name=".$_POST["mname"]."</h1><br>");
echo("<h1>Gender=".$_POST["gender"]."</h1><br>");
echo("<h1>state=".$_POST["state"]."</h1><br>");
echo("<h1>City=".$_POST["city"]."</h1><br>");
echo("<h1>E-mail Id=".$_POST["E-mail"]."</h1><br>");

?>
</body>
</html>
```