**INDIAN INSTITUTE Of INFORMATION TECHNOLOGY**

**SONEPAT**

****

**Application Programming Lab File**

**Submitted By: Submitted To:**

**Paras yadav MD. Arquam**

**Rollno:11912030**

**IT**

**INDEX**

1. Creating HTML Web page forms.

2. Creating home page using HTML

3. Creating XHTML and CSS and understanding it’s use in

creating web pages

4. Setting up and configuration of XAMPP server.

5. Creating Website using PHP

6. Understanding JavaScript

7. Creating a Web page with back end in

PHP and front end in JavaScript

8. Writing and understanding program in Python

**1. Creating Html web page form**

**Procedure:**

1.Make an html file and create a <form> tag.

2.Specify action attribute where the data has to be sent.

3.Use <input> tag to take form data from user. Such as name,

parent’s name etc.

4.Use <textarea> tag for address input.

5.Make radio button for Gender input. And chechbox for

selecing the courses.

6.Use <select> tag to give options for the cities.

7.Take input type file for uploading photo.

8.Take <input> type date for date of birth.

9.Make Submit and Reset buttons.

**Code:**

<html>

    <head>

        <title>form using html</title>

    </head>

    <body>

    <form>

        <h1> REGISTRATION FORM </h1><br>

         <br><br>

        <p>Name: <input type="text" size=65 name="YName" class="box" placeholder="First and last" required> </p>  <br>

        <p>Father's Name: <input type="text" size=65 name="FName" class="box" placeholder="First and last" required> </p>  <br>

        <p>Mother's Name: <input type="text" size=65 name="MName" class="box" placeholder="First and last" required> </p>  <br>

        <div><label>Gender:</label>

            <label for="male">Male</label>

            <input name="Gender" type="radio" value="Male" id="male" required>

            <label for="female">Female</label>

            <input name="Gender" type="radio" value="Male" id="female" required>

            <label for="others">Others</label>

            <input name="Gender" type="radio" value="Male" id="others" required>

        </div>    <br>

        <p> Address: <input type="text" size=65 name="Address" class="box" placeholder="Home address">  </p><br>

        <p>E-mail Address: <input type="email" size=65 name="EMail" class="box" required>  </p><br>

         <p>Password: <input type="text" size=65 name="Password" class="box" required> </p><br>

        <p>Telephone: </textarea> <input type="phone" size=25 name="Telephone" class="box" required> </p><br>

        <p>SELECT YOUR COURSE

            <select type="text" value="" name="Subject" required>

                <option>Choose</option>

                <option>BTECH</option>

                <option>BBA</option>

                <option>BCA</option>

                <option>B.COM</option>

                <option>B.sc</option>

            </select></p><br><br>

        <p>Comments:  <textarea cols="55" name="Comment" class="box">  </textarea></p>

        <p><input type="submit" value="Submit" name="Submit" id="submit">

            <input type="reset" value="Reset"  name="Reset" id="reset">

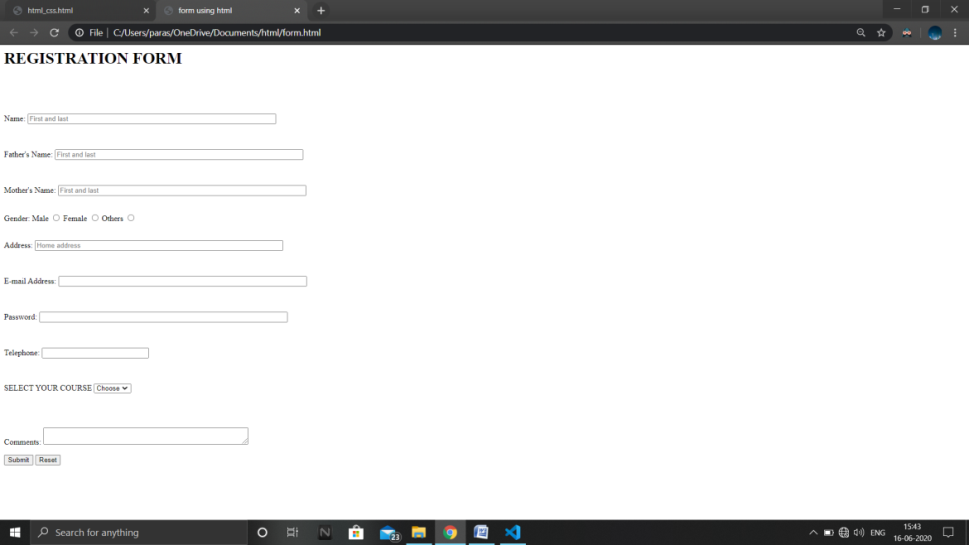
        </p>

    </form>

    </body>

    </html>

**Output:**



**2. Creating Home Page using Html**

**Procedure:**

1.Create the basic HTML structure, which

contains four rows.

2. Each row is a frame formed by frame tag

using frameset element.

3. In first frame put the heading of the web page.

4. Use the second frame as navigation bar and

put navigation buttons for the web page.

5. Next in the body frame put the main elements

of the web page.

6. At the bottom create a footer frame that

contains information about the organisation

maintaining the web page.

7. Add appropriate CSS to each frame.

**Code:**

Main file

<html>

<head>

<title>

IIIT Sonepat

</title>

</head>

<frameset rows='20%,5%,65%,10%' border='0' scrolling="no">

<frame src='head.html'></frame>

<frame src='buttons.html'></frame>

<frame src='container.html'></frame>

<frame src='footer.html'></frame>

</frameset>

</html>

Head frame set

<html>

<head>

    <style>

        #main2{

            font-size: 40px;

        }

    </style>

</head>

<body style="background-color: cornflowerblue;">

<div id='main'>

<center> <h1 id='main2'> IIIT SONEPAT </h1> </center>

</div>

</body>

</html>

Button frame set

<html>

<head>

<style>

    .a{

        background-color: cadetblue;

    }

    #b{

        margin-left: 450px;

    }

</style>

</head>

<body style="background-color:#1abc9c;">

<div id="b">

<button class="a">

Home

</button>

<button class="a">

Academics

</button>

<button class="a">

Examinations

</button>

<button class="a">

Life @ IIITS

</button>

<button class="a">

Placements

</button>

<button class="a">

Contact Us

</button>

<button class="a">

Online Lectures

</button>

</div>

</body>

</html>

Container frame set

<frameset cols='20%,\*,20%' border='0' scrolling="no">

    <frame src='frame1.html' ></frame>

    <frame src='frame2.html' ></frame>

    <frame src='frame3.html'></frame>

    </frameset>>

    </html>

Footer frame set

<html>

<head>

</head>

<body style="background-color: gainsboro;">

<hr>

<P>Contact us at sonepatiiit@gmail.com</P>

<div id="q"></div>

</body>

</html>

Sub frames:

Frame1

<html>

<head>

<style>

#form{

font-size:25px;

}

.title{

font-size:30px;

}

</style>

</head>

<body>

<h2 class="title">

Student Registration

</h2>

<form id ="form">

Name :

<input type="text" name="Name">

<br>

<br>

Branch:

<input type="radio" name="branch" value="IT">IT

<input type="radio" name="branch" value="CSE">CSE

<br>

<br>

Roll no :

<input type="text" name="Roll no">

<br>

<br>

Gender :

<input type="radio" name="gender" value="male">

Male

<input type="radio" name="gender" value="female">

Female

<input type="radio" name="gender" value="Prefer not to say">

Others

<br>

</form>

<button>

Submit

</button>

<br><br><br>

<p>Information regarding hostel</p>

<a href="http://iiitsonepat.ac.in/lifeatiiit/hostels" >Hostel</a>

</body>

</html>

Frame2

<html>

<head>

<style>

img{

margin-left: 290px;

margin-top: 25px;

height: 300px;

width: auto;

}

</style>

</head>

<body>

<img src="C:\Users\paras\OneDrive\Pictures\Saved Pictures\download.png" alt="Logo" >

</body>

</html>

Frame3

<html>

<head>

<style>

.title{

font-size: 30PX;

color: #8e44ad;

}

</style>

</head>

<body>

<p class="title">Academic Programs</p>

<p>The Institute presently offers B.Tech in Information Technology (IT)

    and Computer Science and Engineering (CSE) and B.Tech in Electronics

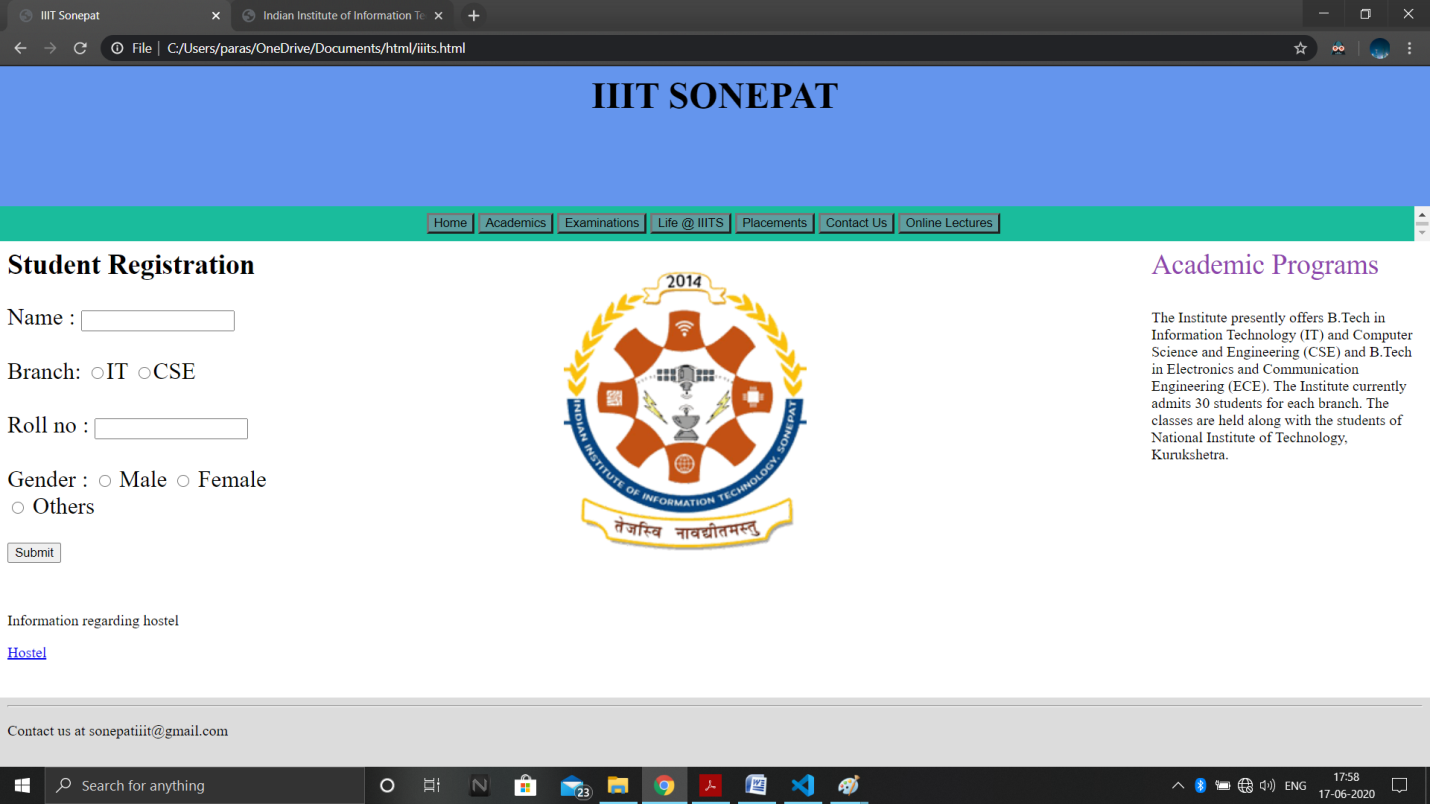
     and Communication Engineering (ECE). The Institute currently admits 30

      students for each branch. The classes are held along with the students

      of National Institute of Technology, Kurukshetra.</p>

    </body>

    </html>

Output:

**3. Creating XHTML and CSS and understanding it’s use**

**Procedure:**

1. Make an html file and create a <form> tag.

2. Specify action attribute where the data has to be sent.

3. Use <input> tag to take form data from user. Such as name,

parent’s name etc.

4. Use <textarea> tag for address input.

5. Make radio button for Gender input. And chechbox for

selecing the courses.

6. Use <select> tag to give options for the cities.

7. Take input type file for uploading photo.

8. Take <input> type date for date of birth.

9. Make Submit and Reset buttons.

10. We can make our website look more stylish and good using

CSS.

11. Using CSS we can align the text to make it look good and

can add background color,can use margin,padding,and

many more.

**Code:**

**Part 1: Html**

<html>

    <head>

    <link rel="stylesheet" type="text/css" href="formstyle2.css">

    </head>

    <body bgcolor=" #2980b9">

    <form id="form" name="form">

        <h1 style="text-align: center; color: rgba(36, 153, 173, 0.781);"> REGISTRATION FORM </h1><br>

        <img src="images.jpg" style="margin-left: 30%;"> <br><br>

        <p class="error">\* required field</p>

        <p>Name:<span class="error">\*</span> <input type="text" size=65 name="YName" class="box" placeholder="First and last" required> </p>  <br>

        <p>Father's Name:<span class="error">\*</span> <input type="text" size=65 name="FName" class="box" placeholder="First and last" required> </p>  <br>

        <p>Mother's Name:<span class="error">\*</span> <input type="text" size=65 name="MName" class="box" placeholder="First and last" required> </p>  <br>

        <div><label>Gender:<span class="error">\*</span></label>

            <label for="male">Male</label>

            <input name="Gender" type="radio" value="Male" id="male">

            <label for="female">Female</label>

            <input name="Gender" type="radio" value="Male" id="female">

            <label for="others">Others</label>

            <input name="Gender" type="radio" value="Male" id="others">

        </div>    <br>

        <p> Address: <input type="text" size=65 name="Address" class="box" placeholder="Home address">  </p><br>

        <p>E-mail Address:<span class="error">\*</span> <input type="email" size=65 name="EMail" class="box" required>  </p><br>

         <p>Password:<span class="error">\*</span> <input type="text" size=65 name="Password" class="box" required> </p><br>

        <p>Telephone: </textarea> <input type="phone" size=25 name="Telephone" class="box" required> </p><br>

        <p>SELECT YOUR COURSE

            <select type="text" value="" name="Subject" required>

                <option>Choose</option>

                <option>BTECH</option>

                <option>BBA</option>

                <option>BCA</option>

                <option>B.COM</option>

                <option>B.sc</option>

            </select><span class="error">\*</span></p><br><br>

        <p>Comments:  <textarea cols="55" name="Comment" class="box">  </textarea></p> <br>

        <div><input type="submit" value="Submit" name="Submit" id="submit">

            <input  type="reset" value="Reset"  name="Reset" id="reset">

        </div>

    </form>

    </body>

    </html>

**Part 2: CSS**

.box {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

}

#submit {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

    background-color: #61eb34 ;

    width: 15%;

    height: 30px

}

#reset {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

    background-color: red;

    width: 15%;

    height: 30px

}

form {

    background-color:rgb(207, 235, 241);

    border: 0px solid black;

    border-radius: 20px;

    padding: 2%;

    margin: 0 auto;

    width: 600px;

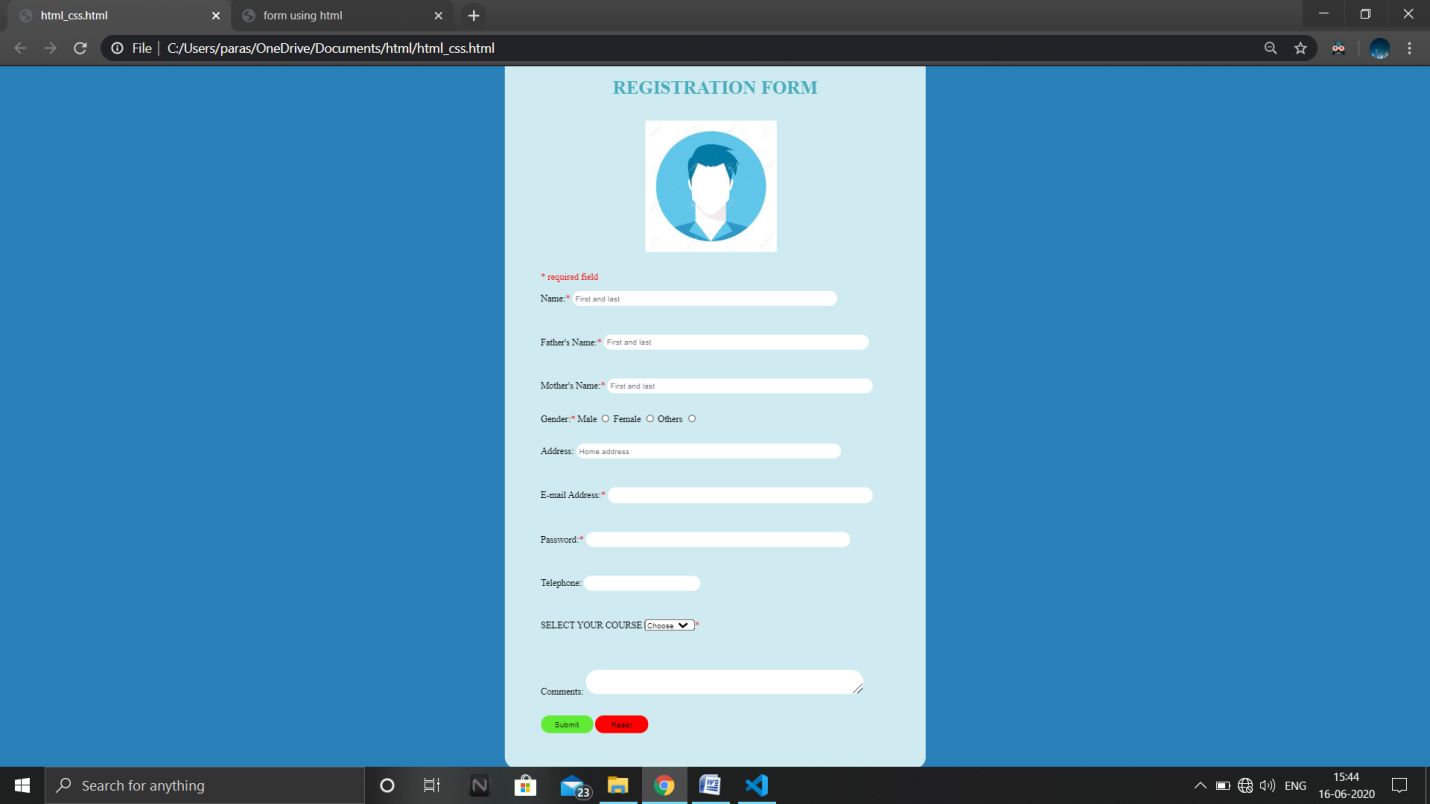
}

.error{

    color: red;

}

**Output:**



**4. Setting up and understanding pf Apache Tomact**

**Server**

**Procedure:**

**Step 1**

**Download and Install Tomcat**

1. Go to http://tomcat.apache.org/download-70.cgi then go to the Binary

Distribution/Core/

and download the "zip" package (for example "apache-tomcat-7.0.40.zip")

2. Now unzip the downloaded file into a directory of our choice.

**Step 2**

**Check the installed directory to ensure it contains the following sub-directories:**

a.bin folder

b. logs folder

c. webapps folder

d. work folder

e. temp folder

f. conf folder

g. lib folder

**Step 3**

**Create Environment variable JAVA\_HOME.**

**Configure Tomcat Server**

The configuration files of the Apache Tomcat Server are located in the "conf" sub-directory

of our

Tomcat installed directory, for example "E:\myserver\tomcat7.0.40\conf". There are 4

configuration

XML files:

1. context.xml file

2. tomcat-users.xml file

3. server.xml file

4. web.xml file

Before proceeding, make a BACKUP of the configuration files.

Step 4(a) "conf\web.xml"; Enabling a Directory Listing

Open the configuration file "web.xml". We shall enable the directory listing by changing

"listings" from

"false" to "true" for the "default" servlet.

<param-value>true</param-value> like:

Step 4(b) "conf\server.xml file"; set the TCP Port Number

Open the file "server.xml" in a text editor.

The default port number of Tomcat is 8080. We can change it according to our need.

Step 4(c) "conf\context.xml"; Enabling Automatic Reload

In that we set reloadable="true" to the <Context> element to enable automatic reload after

code

Step 4(d) (Optional) "conf\tomcat-users.xml"

It is used to manage Tomcat by adding the highlighted lines, inside the <tomcat-users>

elements.

In that we can add a password and username as an optional step.

**Step 5**

**Now, start the tomcat server**

Executable programs and scripts are kept in the "bin" sub-directory of the Tomcat installed

directory

Step 5(a) Start Server

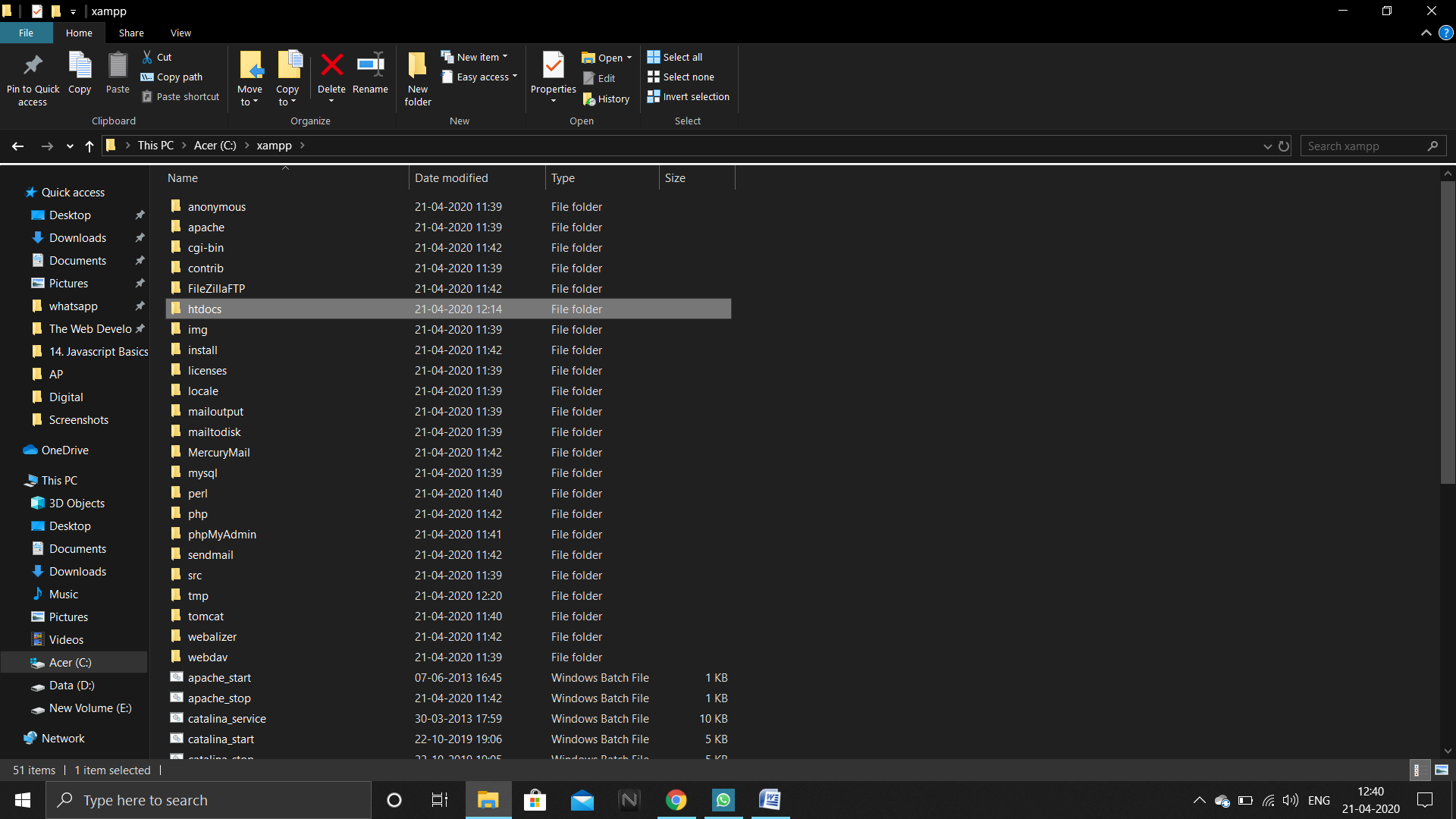
Step 5(b) Access the Server

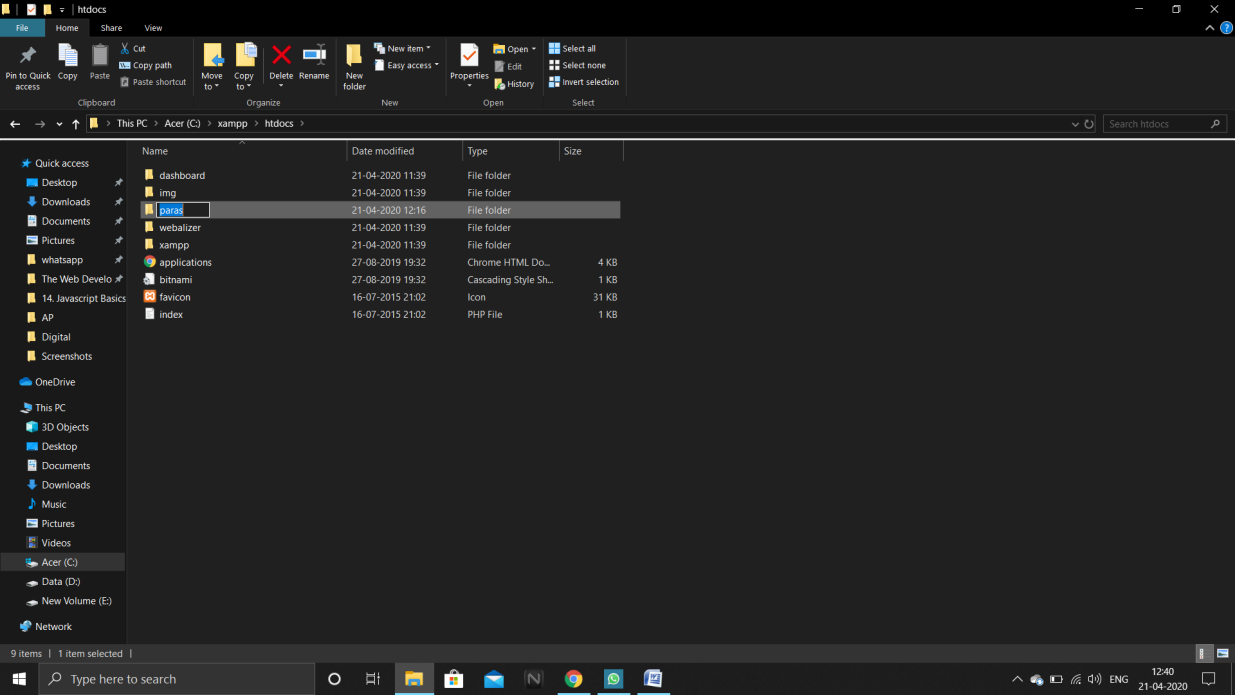
Open a browser then enter the URL "http://localhost:8080" to access the Tomcat

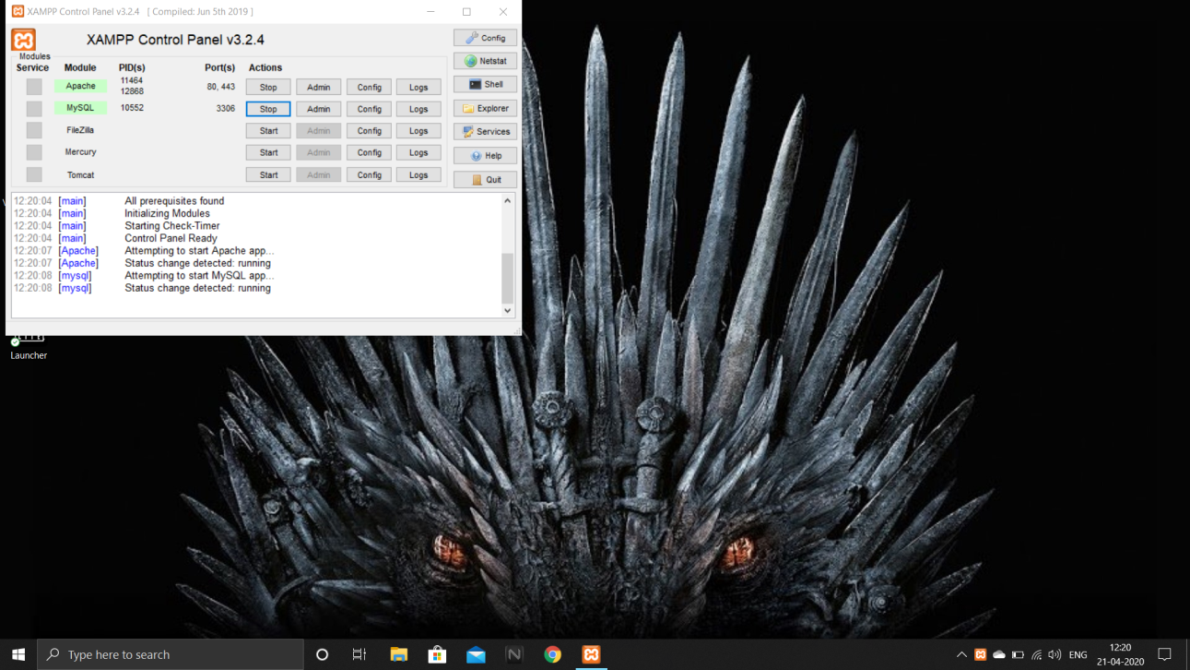
server's welcome

page.

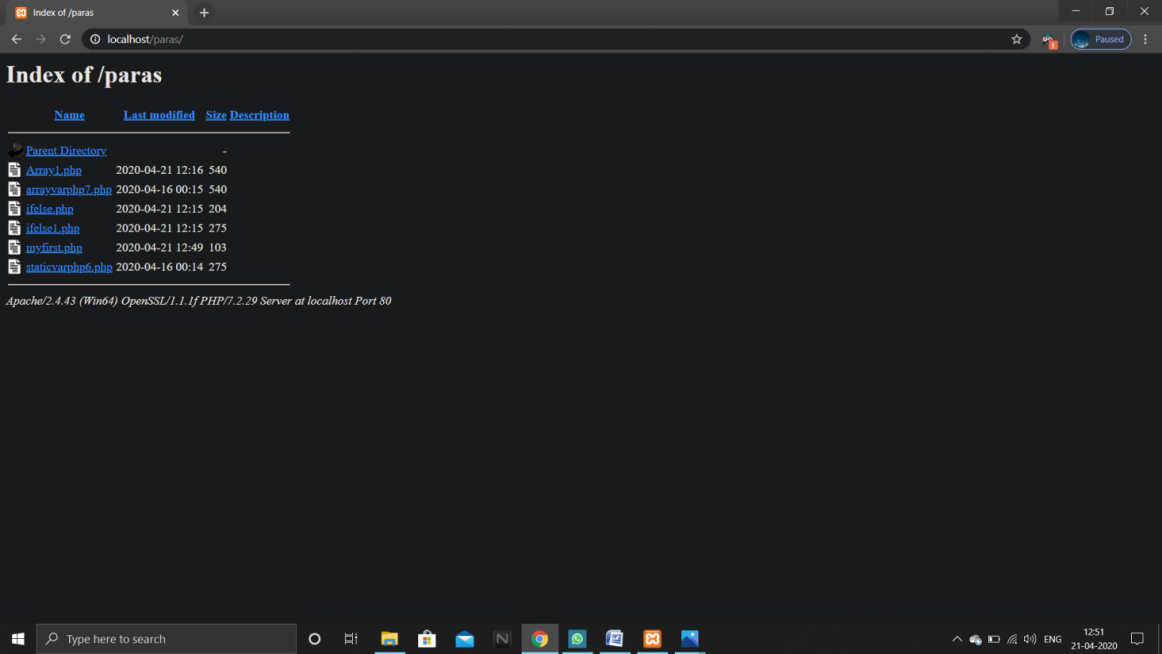
**Output:**

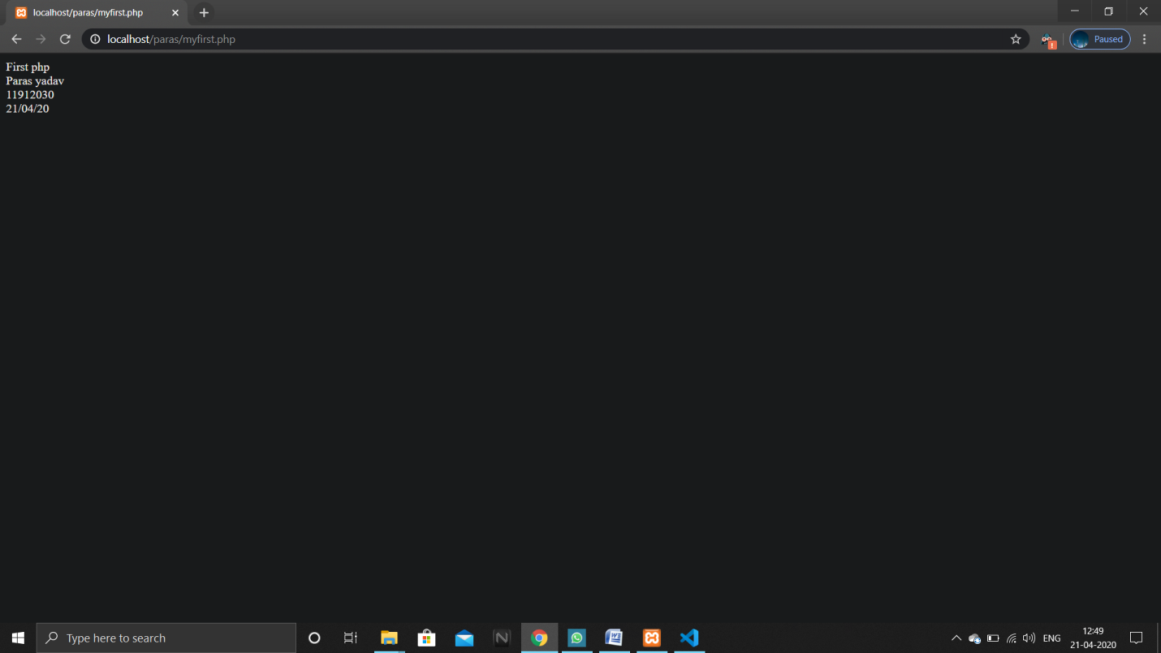












**5. Creating Website using PHP**

**Procedure:**

1.Create the basic HTML structure with title

prime check.

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

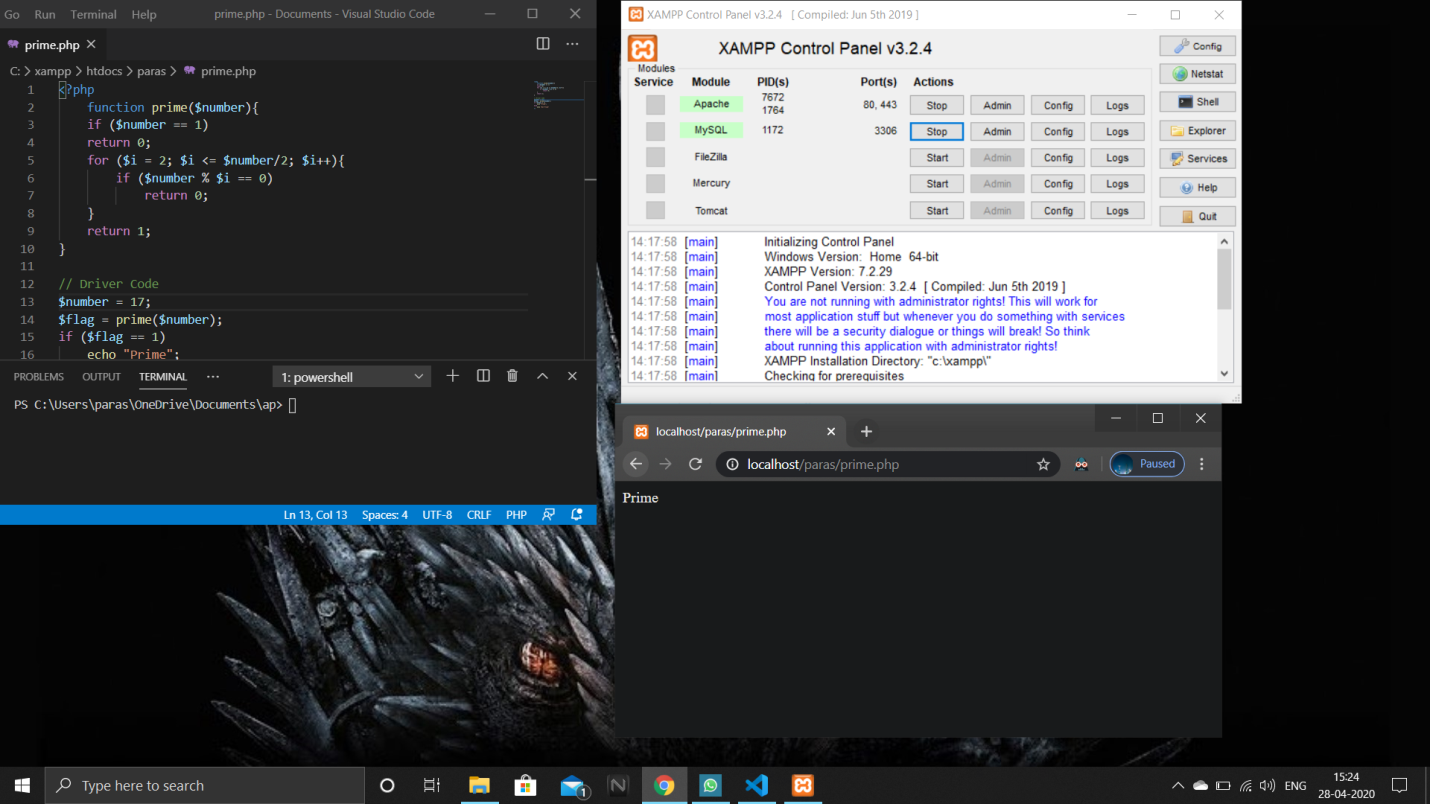
prime.

3. Apply the necessary if-else condition for

checking for prime.

4. Print the result using echo.

**Code and Output:**



**6. Understanding Java Script**

**Procedure:**

1.Create the basic HTML structure with script tag

in head of the page.

2. Create two functions, mOver and mOut, for

mouse over and mouse out respectively.

3. In the div tag write events onmouseover and

onmouseout and equal them to the corresponding

functions.

**Code:**

<!DOCTYPE html>

<html>

<body>

<div onmouseover="mOver(this)" onmouseout="mOut(this)"

style="background-color:#D94A38;width:120px;height:20px;padding:40px;">

Mouse Over Me</div>

<script>

function mOver(obj) {

  obj.innerHTML = "Thank You"

}

function mOut(obj) {

  obj.innerHTML = "Mouse Over Me"

}

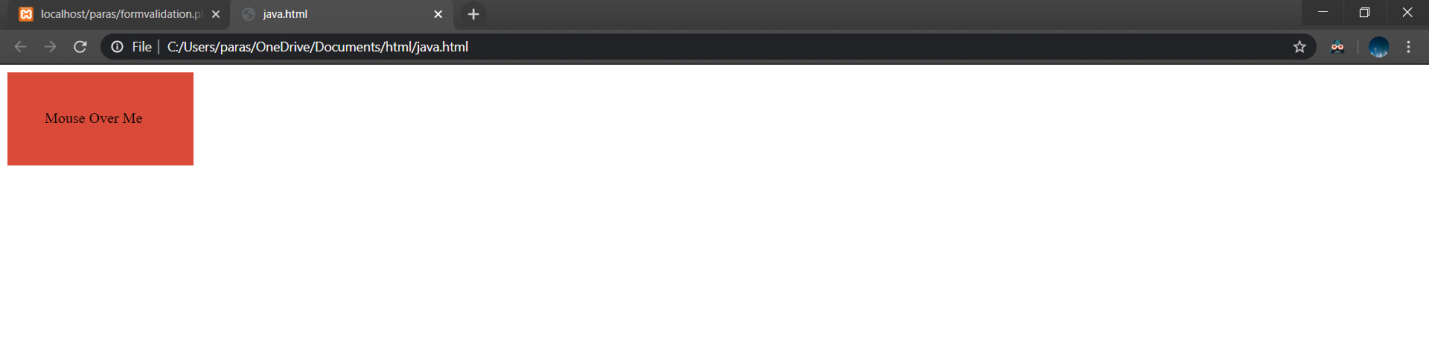
</script>

</body>

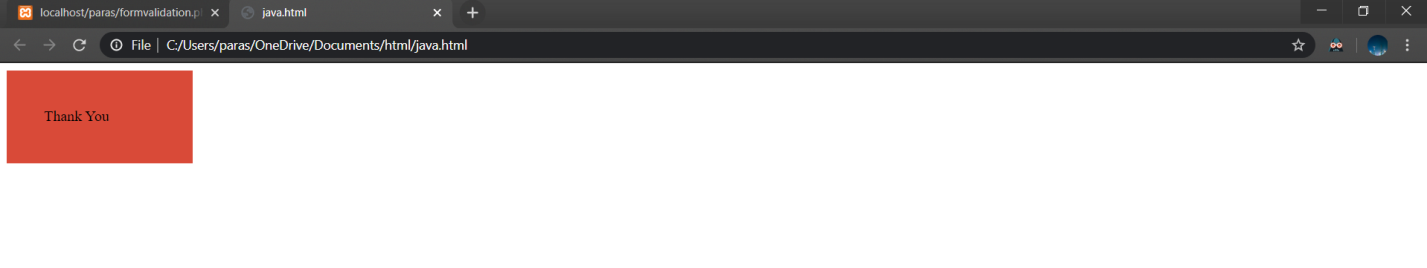
</html>

**Output:**

Before mouse over

****

On mouse over

****

**7. Creating a Web page with back end in PHP and front end in JavaScript and hosting it on Apache Tomcat Server**

**Procedure:**

1. Create a Html file and insert JavaScript and CSS file externally

2. Make a form in the main file (Html) using <form></form> tags.

3. Write a code for the validation of the form using JavaScript.

4. Write CSS in the CSS file for making it colourful.

5. After pressing submit button if there is some error in the form an

alert command will run and will be displayed on the screen.

6. In the form tag use “action” to tell the form what to do after submit

button is pressed.

7. Write a PHP code which will run after we press the submit button.

**Code:**

Main Html code

    <html>

    <head>

    <script src="formvalidation.js"> </script>

    <link rel="stylesheet" type="text/css" href="formstyle2.css">

    </head>

    <body bgcolor=" #2980b9">

    <form id="form" name="form" action="submit.php" onsubmit="return validate();" method="post">

        <h1 style="text-align: center; color: rgba(36, 153, 173, 0.781);"> REGISTRATION FORM </h1><br>

        <img src="images.jpg" style="margin-left: 30%;"> <br><br>

        <p class="error">\* required field</p>

        <p>Name:<span class="error">\*</span> <input type="text" size=65 name="YName" class="box" placeholder="First and last"> </p>  <br>

        <p>Father's Name:<span class="error">\*</span> <input type="text" size=65 name="FName" class="box" placeholder="First and last"> </p>  <br>

        <p>Mother's Name:<span class="error">\*</span> <input type="text" size=65 name="MName" class="box" placeholder="First and last"> </p>  <br>

        <div><label>Gender:<span class="error">\*</span></label>

            <label for="male">Male</label>

            <input name="Gender" type="radio" value="Male" id="male">

            <label for="female">Female</label>

            <input name="Gender" type="radio" value="Male" id="female">

            <label for="others">Others</label>

            <input name="Gender" type="radio" value="Male" id="others">

        </div>    <br>

        <p> Address: <input type="text" size=65 name="Address" class="box" placeholder="Home address">  </p><br>

        <p>E-mail Address:<span class="error">\*</span> <input type="email" size=65 name="EMail" class="box">  </p><br>

         <p>Password:<span class="error">\*</span> <input type="text" size=65 name="Password" class="box"> </p><br>

        <p>Telephone: </textarea> <input type="phone" size=25 name="Telephone" class="box"> </p><br>

        <p>SELECT YOUR COURSE

            <select type="text" value="" name="Subject">

                <option>Choose</option>

                <option>BTECH</option>

                <option>BBA</option>

                <option>BCA</option>

                <option>B.COM</option>

                <option>B.sc</option>

            </select><span class="error">\*</span></p><br><br>

        <p>Comments:  <textarea cols="55" name="Comment" class="box">  </textarea></p>

        <p><input type="submit" value="Submit" name="Submit" id="submit">

            <input type="reset" value="Reset"  name="Reset" id="reset">

        </p>

    </form>

    </body>

    </html>

JavaScript Validation

function validate()

{

    var yname = document.form.YName;

    var fname = document.form.FName;

    var mname = document.form.MName;

    var radio1 = document.getElementById("male").checked;

    var radio2 = document.getElementById("female").checked;

    var radio3 = document.getElementById("others").checked;

    var email = document.form.EMail;

    var phone = document.form.Telephone;

    var what =  document.form.Subject;

    var password = document.form.Password;

    var address = document.form.Address;

    if (yname.value == "")

    {

        window.alert("Please enter your name.");

        yname.focus();

        return false;

    }

    if (fname.value == "")

    {

        window.alert("Please enter your father's name.");

        fname.focus();

        return false;

    }

    if (mname.value == "")

    {

        window.alert("Please enter your mother's name.");

        mname.focus();

        return false;

    }

    if ((radio1 == "") && (radio2=="") && (radio3==""))

    {

        window.alert("Please select your gender.");

        return false;

    }

    if (address.value == "")

    {

        window.alert("Please enter your address.");

        address.focus();

        return false;

    }

    if (email.value == "")

    {

        window.alert("Please enter a valid e-mail address.");

        email.focus();

        return false;

    }

    if (password.value == "")

    {

        window.alert("Please enter your password");

        password.focus();

        return false;

    }

    if (phone.value == "")

    {

        window.alert("Please enter your telephone number");

        phone.focus();

        return false;

    }

    if (what.selectedIndex < 1)

    {

        alert("Please enter your course.");

        what.focus();

        return false;

    }

    return ;}

CSS

.box {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

}

#submit {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

    background-color: #61eb34 ;

    width: 15%;

    height: 30px

}

#reset {

    border-radius: 50px;

    border: 0px solid grey;

    padding: 5px;

    background-color: red;

    width: 15%;

    height: 30px

}

form {

    background-color:rgb(207, 235, 241);

    border: 0px solid black;

    border-radius: 20px;

    padding: 2%;

    margin: 0 auto;

    width: 600px;

}

.error{

    color: red;

}

PHP

<?php

?>

<html>

<head>

    <title>page after submission</title>

    <style>

 .aftersubmission{

    background-color:rgb(207, 235, 241);

    border: 0px solid black;

    border-radius: 20px;

    padding: 2%;

    margin: 0 auto;

    width: 600px;

}

#google{

    height: 50px;

    width:50px;

}

#h2{

    color: lightgreen;

}

#p{

    color: red;

}

    </style>

</head>

<body bgcolor="#00d2d3">

    <div class="aftersubmission">

    <h2 id="h2"> Your Response is Submitted Successfully</h2>

    <p id="p"> We will further inform you via Email</p> <br>

    <a href="https://www.google.co.in/"><span style="color: red; margin-left:90%;"><img id="google" src="download.png"></span></a>

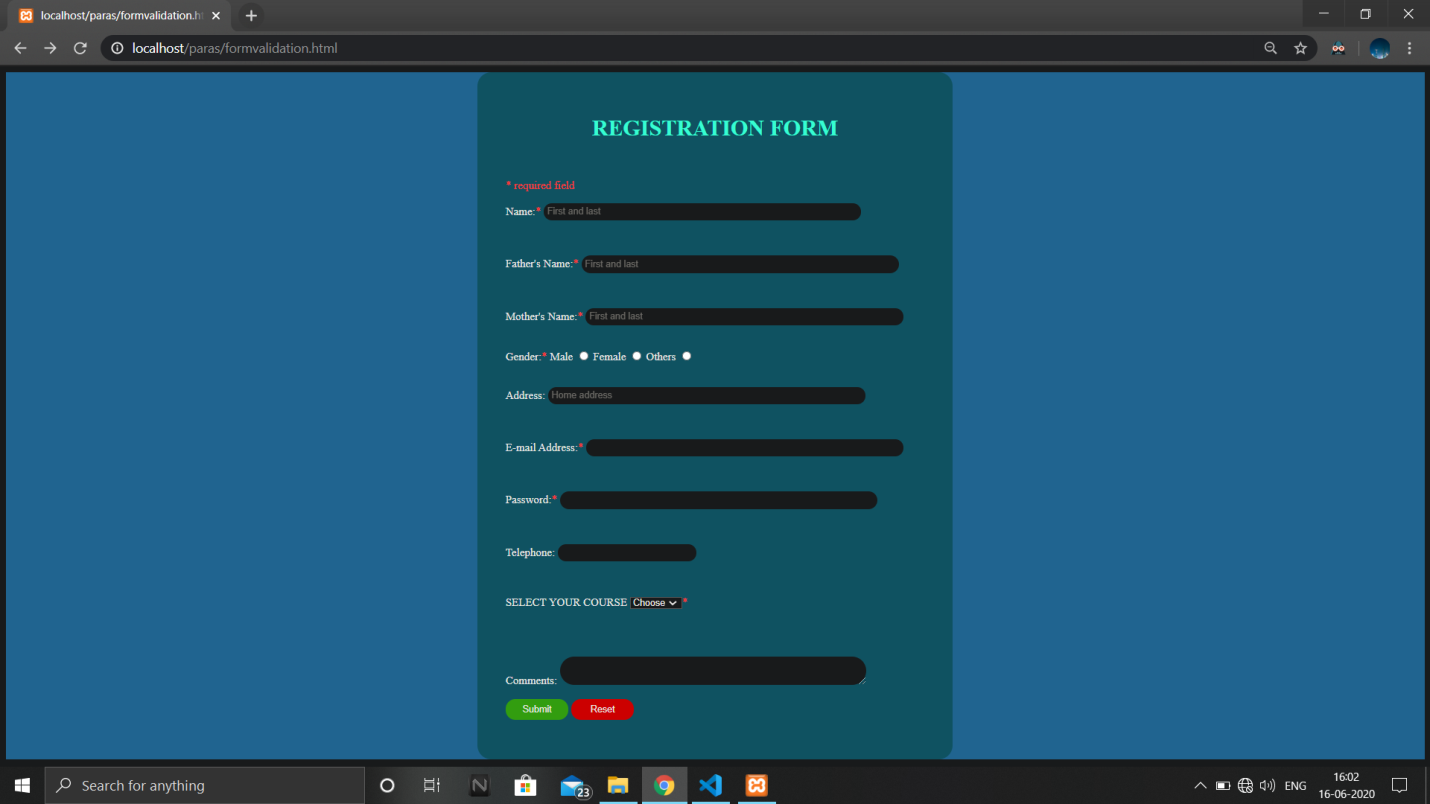
    </div>

</body>

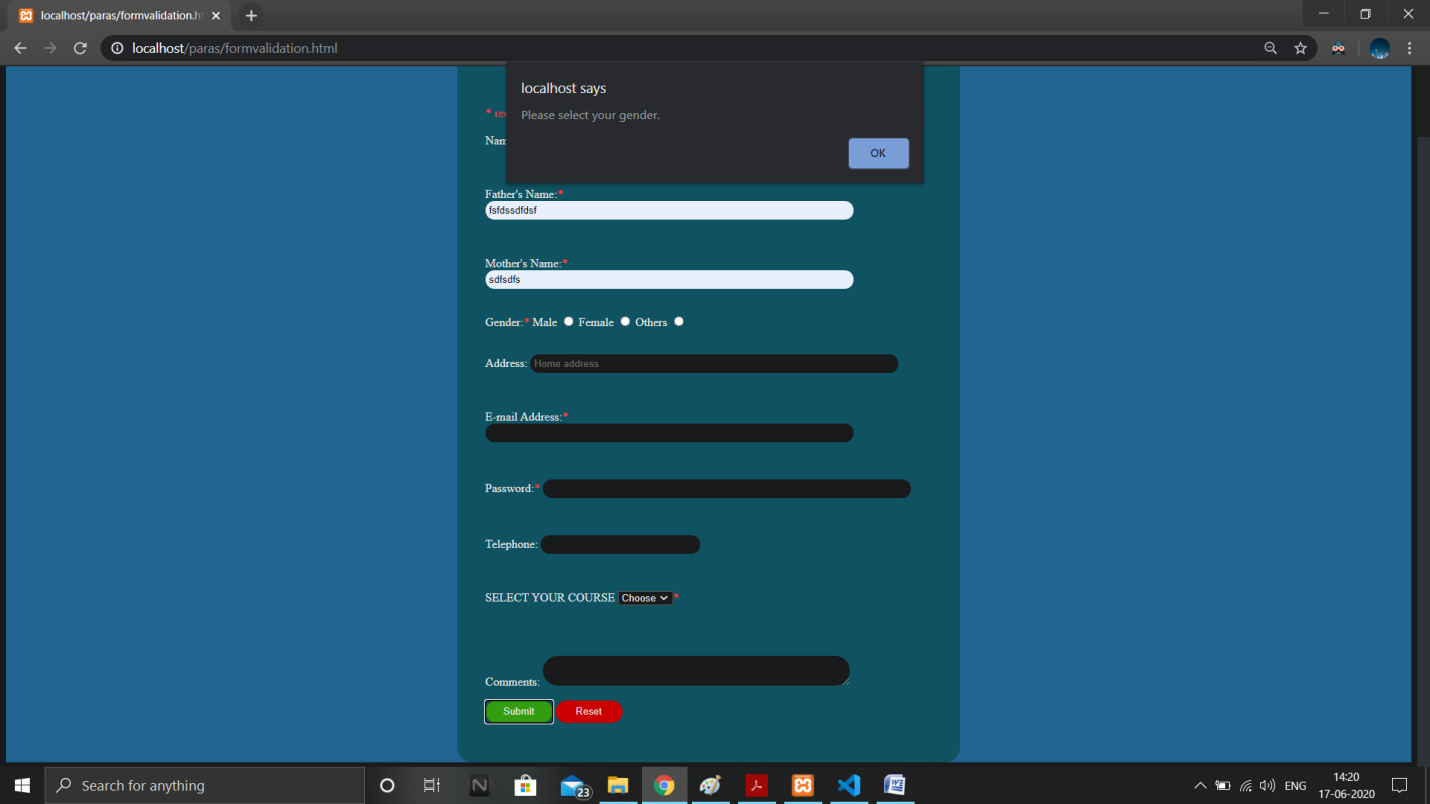
</html>

**Output:**

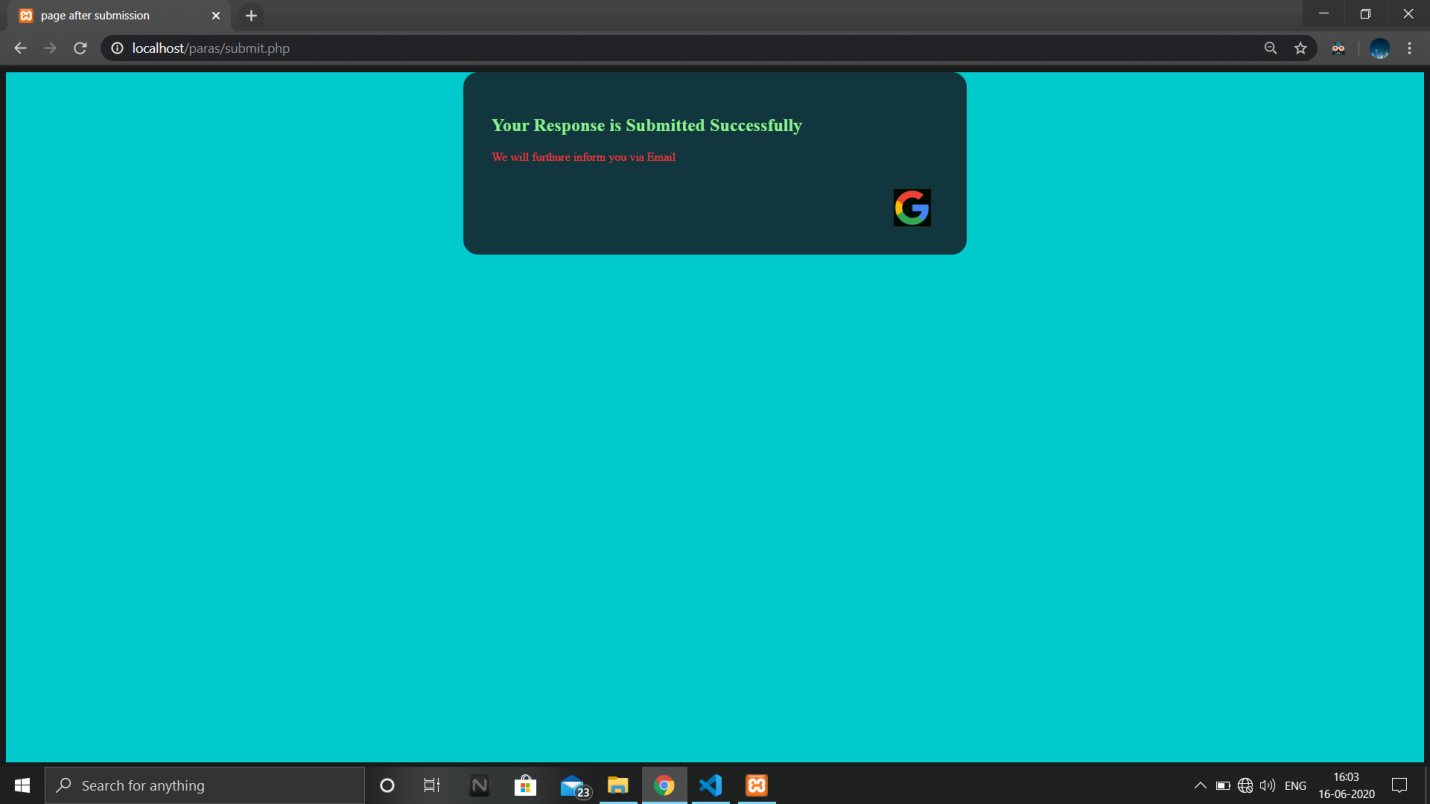
Form

****

Validation



After successful submission the output of PHP code



**8. Writing and understanding program in Python**

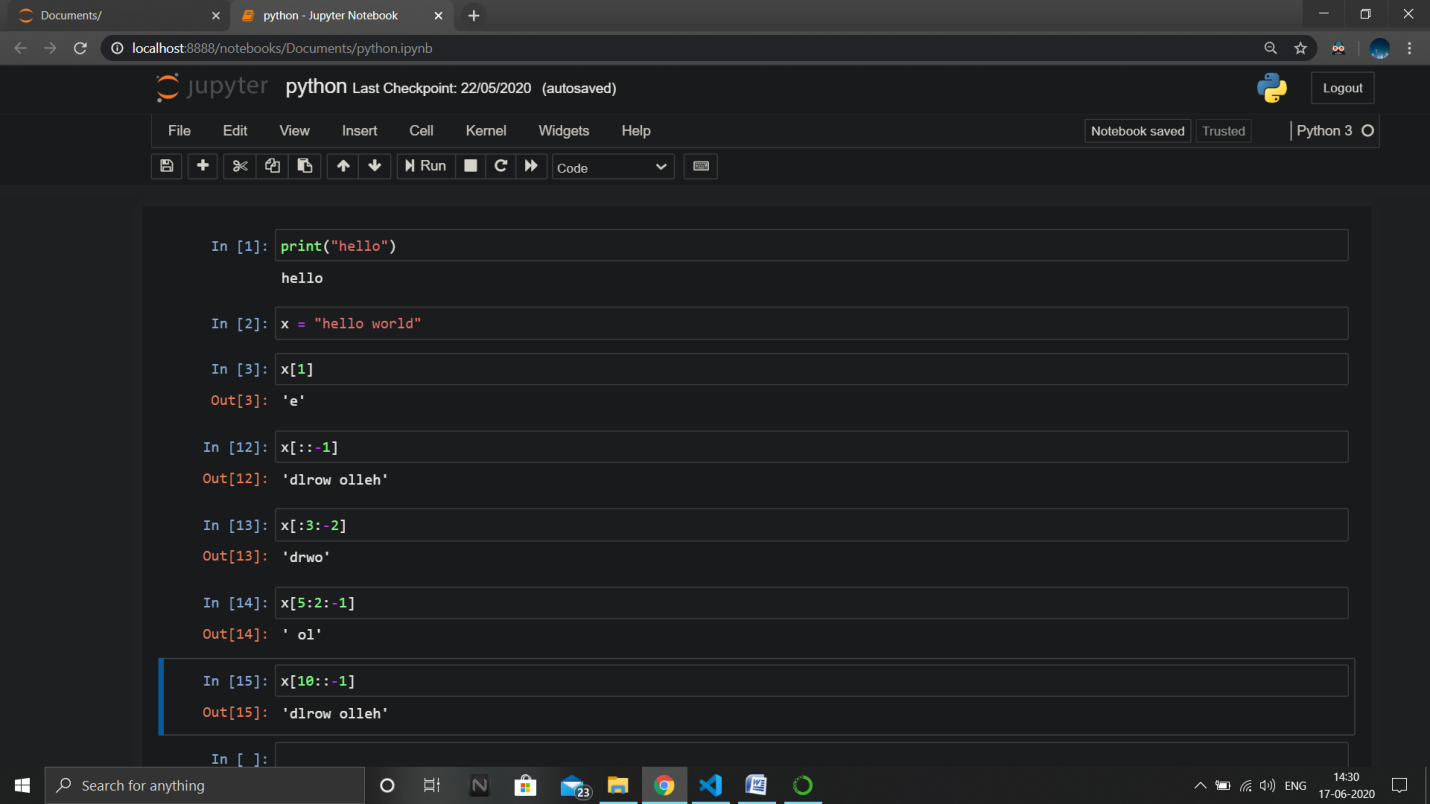
**Procedure:**

1. Open your Jupiter notebook to write your python code.

2. Write a program to print Hello World.

3. Use Slicing syntax to print out parts of the string entered above.

**Code and Output:**

****