APPLICATION PROGRAMMING PRACTICLE FILE

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, SONEPAT

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INDEX

1 Write a program for creating HTML Form

HTML Code :

```html
<!DOCTYPE html>
        <html lang="en">
        <meta charset="utf-8">
            <head>
                <title>HTML Forms</title>
                <link rel="stylesheet" type="text/css" href="style.css">
            </head>
            <body>
                <div class="a">
                    <h1>Student Form</h1>
                    <img src="http://iiitsonepat.ac.in/iiits-content/uploads/2019/06/logonew.png" alt="Logo" width="60%">
                </div>
                <div class="abc">
                    <form class="" action="Submit.html" method="post">
                        <div class="ab">
                            <table width="100%">
                                <tr>
                                    <td>Name:</td>
                                    <td><input type="text" placeholder="Enter Your Name Here" required></td>
                                </tr>
                                <tr>
                                    <td>Roll No:</td>
                                    <td>  <input type="text" placeholder="Enter Your Roll No here" required></td>
                                </tr>
                                <tr>
                                    <td>Mobile No:</td>
                                    <td><input type="tel"  placeholder="Enter Your Number Here" pattern="[789][0-9]{9}" required></td>
                                </tr>
                                <tr>
                                    <td>E-mail:</td>
                                    <td><input type="email" placeholder="Enter Your E-mail Here" required></td>
                                </tr>
                                    <td>College:</td>
                                    <td><input type="text" placeholder="Enter Your College
```

```html
                Name"></td>
                                        </table><br><br><br>
                                        <table width="100%">
                                                <tr>
                                                        <td><input type="submit" value="Submit"></td>
                                                        <td><input type="reset" value="Clear"></td>
                                                </tr>
                                        </table>
                                </div>
                        </form>
                </div>
        </body>
</html>
```

CSS CODE:

```css
body{
background-
color :
white;
                        }
                .abc{ margin :0px 300px 200px 300px ;
                        }
                .ab{ margin : auto;
                        background-color: grey;
                    }
                input[type=text],input[type=email]{ width : 90%;
                                                                    }

                .a{ padding : 20px;
                        text-align :center;
                    }
```

HTML SUBMIT CODE :

```html
<!DOCTYPE
html>
        <html lang="en">
        <meta charset="utf-8">
                <head>
                        <title>Successful Submission</title>
                </head>
                <body>
                        <h1>You have succesfully submitted the form!!</h1>
                        <button onclick="document.location = 'form.html'">click here to submit another form</button>
                </body>
        </html>
```

OUTPUT :

Student Form

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY SONEPAT   भारतीय सूचना प्रौद्योगिकी संस्थान, सोनीपत

(An Institute of National Importance under an Act of Parliament)

Name: Enter Your Name Here

Roll No: Enter Your Roll No here

Mobile No: Enter Your Number Here

E-mail: Enter Your E-mail Here

College: Enter Your College Name

Submit   Clear

2 Write a program for creating Homepage using HTML

HTML Code :

```html
<!DOCTYPE html>
    <html>
    <meta charset="UTF-8">
    <head>
    <title> homepage </title>
    <link rel="stylesheet" type="text/css" href="style.css">
    </head>
    <body>
    <div>
        <img src="http://iiitsonepat.ac.in/iiits-content/uploads/2019/06/logonew.png" alt="Logo" width="100%">
    </div>
    <div class="navbar">
        <a href="#">Home</a>
        <a href="#">Admission</a>
        <a href="#">Academics</a>
        <a href="#" class="right">Covid-19 Notes</a>
    </div>
    <section>
      <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner3.jpg"
    style="width:100%">
      <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner2.jpg"
    style="width:100%">
      <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner4.jpg"
    style="width:100%">
    </section>
    <script>
    var myIndex = 0;
    carousel();
    function carousel() {
      var i;
      var x = document.getElementsByClassName("mySlides");
      for (i = 0; i < x.length; i++) {
        x[i].style.display = "none";
      }
      myIndex++;
      if (myIndex > x.length) {myIndex = 1}
      x[myIndex-1].style.display = "block";
      setTimeout(carousel, 3000);
    }
    </script>
```
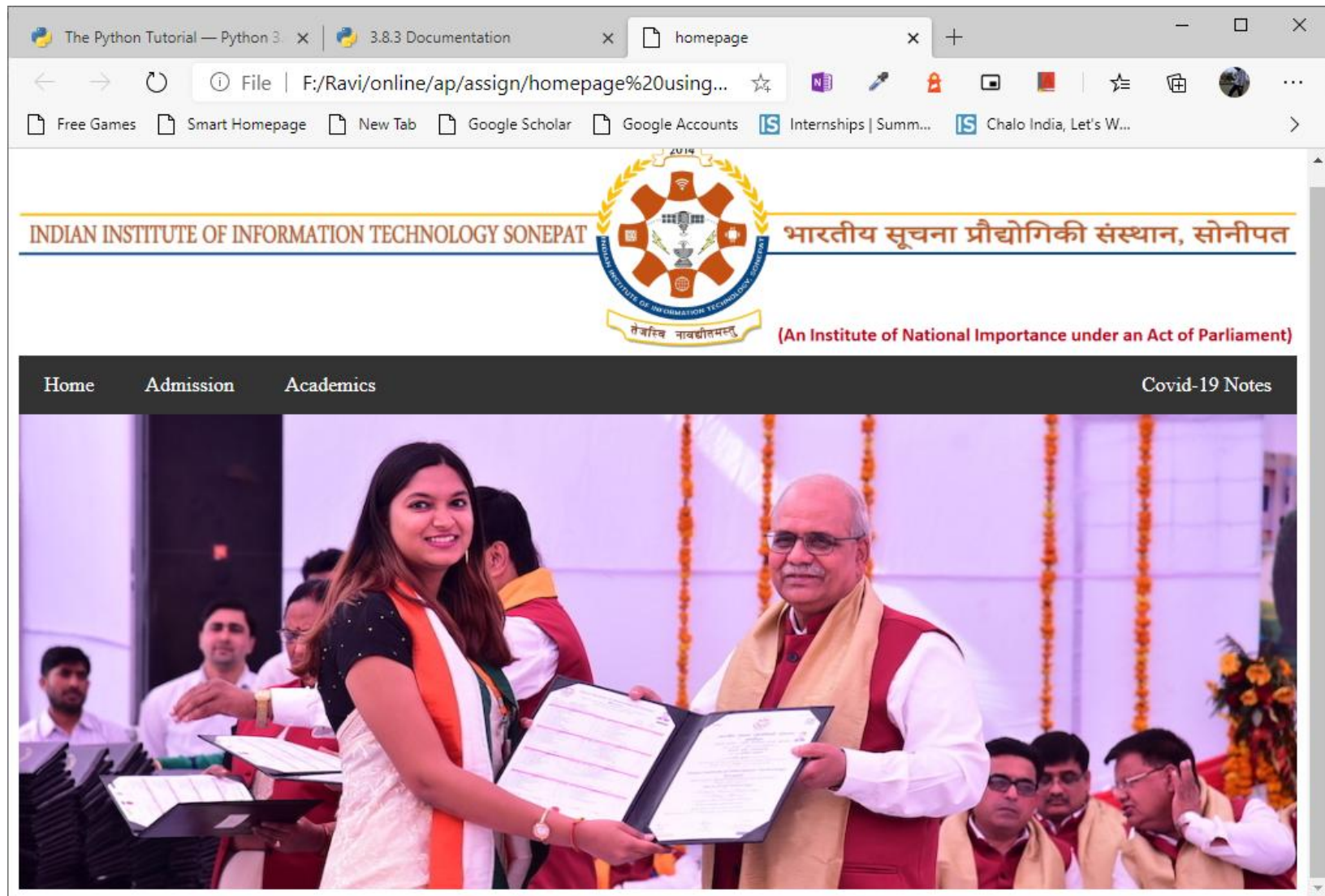
```
        </body>
    </html>
```

CSS CODE :

```css
.navbar
{
        overflow: hidden;
        background-color: #333;
    }
    .navbar a {
      float: left;
      display: block;
      color: white;
      text-align: center;
      padding: 14px 20px;
      text-decoration: none;
    }
    .navbar a.right {
      float: right;
    }
    .navbar a:hover {
      background-color: #ddd;
      color: black;
    }
```
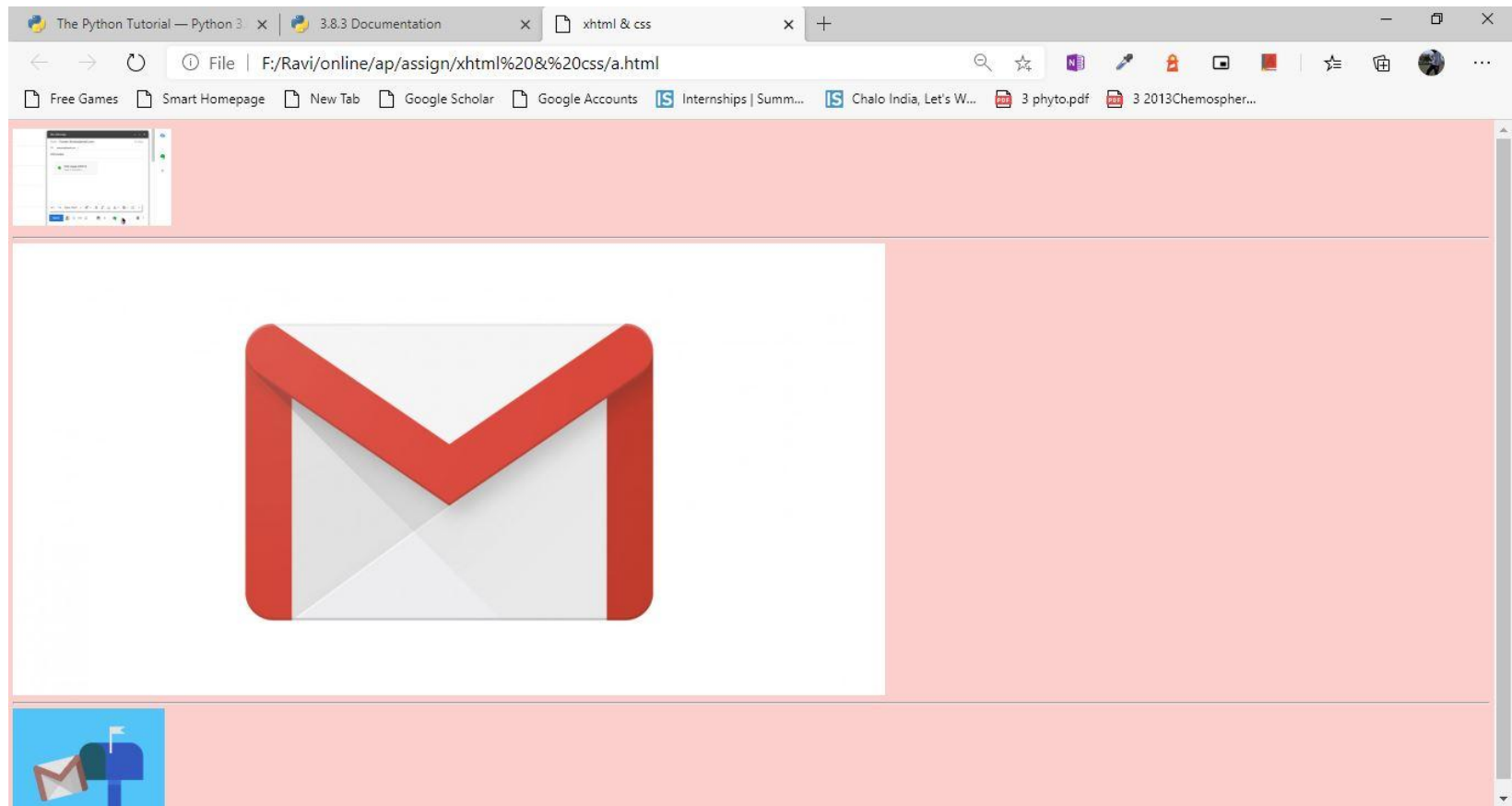
3 Write a program to understand XHTML and CSS

HTML CODE :

```
<!DOCTYPE
html
PUBLIC "-
//W3C//DTD
XHTML
1.1//EN"
           "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
           <html xmlns="http://www.w3.org/1999/xhtml">
           <head>
             <title>xhtml & css</title>
             <link rel="stylesheet" type="text/css" href="a.css"/>
           </head>
           <body>
                 <p>
                     <a href="mailto:abc@gmail.com"><img src="https://encrypted-
           tbn0.gstatic.com/images?q=tbn%3AANd9GcRMyYneZ0ipxdRWLHnuKMPv0Re7vtVNHAwIK34m-AbHEhMhpuBH&usqp=CAU" alt="imgage
           as email link" /></a>
                     <br/>
                     <hr/>
                     <img src="https://cdn0.tnwcdn.com/wp-content/blogs.dir/1/files/2018/04/Gmail-dfs-new.jpg"
           alt="This is Gmail logo"/>
                     <br/>
                     <hr/>
                     <a href="mailto:abc@gmail.com"><img src="https://encrypted-
           tbn0.gstatic.com/images?q=tbn%3AANd9GcRstEPEvHHb-HKtVnZo9gHR4I6f8RmgH9ZreSnrHfGx2SDOoxKR&usqp=CAU" alt="This
           is gmail link"/></a>
                 </p>
           </body>
           </html>
```
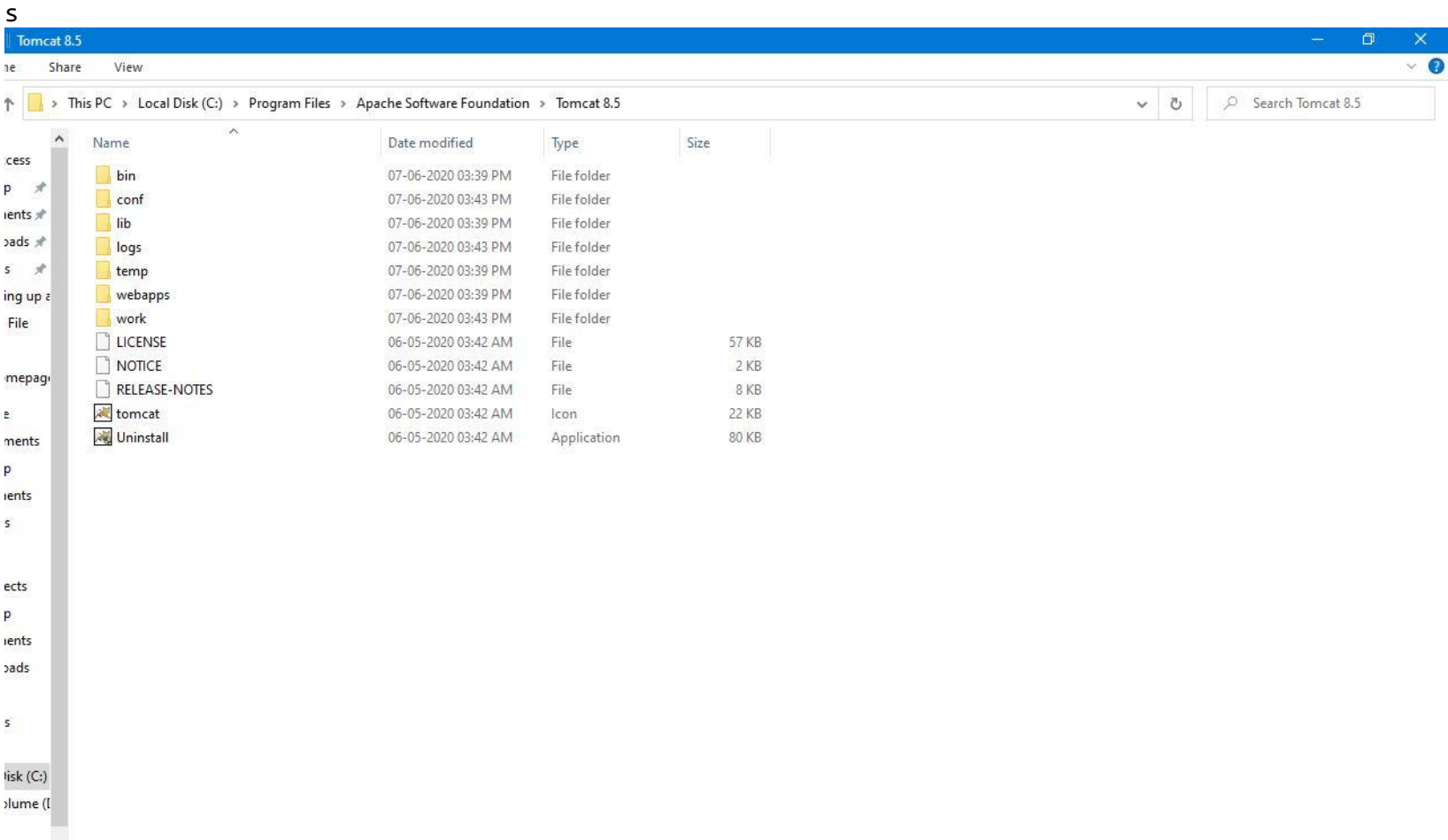
CSS CODE:

```
body{background-color:#fccfcc}
```

Setting up and configuration of apache Tomcat server

Apache Tomcat/8.5.55

Home   Documentation   Configuration   Examples   Wiki   Mailing Lists   Find Help

Apache Tomcat/8.5.55

If you're seeing this, you've successfully installed Tomcat. Congratulations!

Recommended Reading:
Security Considerations How-To
Manager Application How-To
Clustering/Session Replication How-To

Server Status

Manager App

Host Manager

Developer Quick Start

Tomcat Setup   Realms & AAA   Examples   Servlet Specifications
First Web Application JDBC DataSources   Tomcat Versions

Managing Tomcat

For security, access to the manager webapp is restricted. Users are defined in:

$CATALINA_HOME/conf/tomcat-users.xml

In Tomcat 8.5 access to the manager application is split between different users. Read more...

Release Notes

Changelog

Migration Guide

Documentation

Tomcat 8.5 Documentation

Tomcat 8.5 Configuration

Tomcat Wiki

Find additional important configuration information in:

$CATALINA_HOME/RUNNING.txt

Developers may be interested in:

Tomcat 8.5 Bug Database
Tomcat 8.5 JavaDocs

Getting Help

FAQ and **Mailing Lists**

The following mailing lists are available:

tomcat-announce
Important announcements, releases, security vulnerability notifications. (Low volume).

tomcat-users
User support and discussion

taglibs-user
User support and discussion for Apache Taglibs

tomcat-dev
Development mailing list, including commit

localhost:9999/docs/co

Administrator: Command Prompt

```
C:\Program Files\Apache Software Foundation\Tomcat 8.5\bin>startup.bat
Using CATALINA_BASE:   "C:\Program Files\Apache Software Foundation\Tomca
t 8.5"
Using CATALINA_HOME:   "C:\Program Files\Apache Software Foundation\Tomca
t 8.5"
Using CATALINA_TMPDIR: "C:\Program Files\Apache Software Foundation\Tomca
t 8.5\temp"
Using JRE_HOME:        "C:\Program Files\Java\jdk-13.0.2"
Using CLASSPATH:       "C:\Program Files\Apache Software Foundation\Tomca
t 8.5\bin\bootstrap.jar;C:\Program Files\Apache Software Foundation\Tomca
t 8.5\bin\tomcat-juli.jar"
C:\Program Files\Apache Software Foundation\Tomcat 8.5\bin>
```


Tomcat

```
tory [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\exa
mples] has finished in [961] ms
07-Jun-2020 16:52:25.748 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deploying web application directory
 [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\host-ma
nager]
07-Jun-2020 16:52:25.836 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deployment of web application direc
tory [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\hos
t-manager] has finished in [88] ms
07-Jun-2020 16:52:25.838 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deploying web application directory
 [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\manager
]
07-Jun-2020 16:52:25.948 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deployment of web application direc
tory [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\man
ager] has finished in [110] ms
07-Jun-2020 16:52:25.951 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deploying web application directory
 [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\ROOT]
07-Jun-2020 16:52:26.028 INFO [localhost-startStop-1] org.apache.catalin
a.startup.HostConfig.deployDirectory Deployment of web application direc
tory [C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps\ROO
T] has finished in [77] ms
07-Jun-2020 16:52:26.035 INFO [main] org.apache.coyote.AbstractProtocol.
start Starting ProtocolHandler ["http-nio-9999"]
07-Jun-2020 16:52:26.054 INFO [main] org.apache.catalina.startup.Catalin
a.start Server startup in 2076 ms
```

6 Write a program for Creating Website using PHP

HTML code:

```html
<!DOCTYPE html>
<html>
<meta charset="UTF-8">
<head>
<title> homepage </title>
<link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
<div>
        <img src="http://iiitsonepat.ac.in/iiits-content/uploads/2019/06/logonew.png" alt="Logo" width="100%">
</div>
<div class="navbar">
        <a href="1.php">Home</a>
        <a href="#">Admission</a>
        <a href="#">Academics</a>
        <a href="#" class="right">Covid-19 Notes</a>
</div>
<section>
  <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner3.jpg"
style="width:100%">
  <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner2.jpg"
style="width:100%">
  <img class="mySlides" src="http://iiitsonepat.ac.in/iiits-content/uploads/2018/06/new-banner4.jpg"
style="width:100%">
</section>
<script>
var myIndex = 0;
carousel();
function carousel() {
  var i;
  var x = document.getElementsByClassName("mySlides");
  for (i = 0; i < x.length; i++) {
    x[i].style.display = "none";
  }
  myIndex++;
  if (myIndex > x.length) {myIndex = 1}
  x[myIndex-1].style.display = "block";
  setTimeout(carousel, 3000);
}
</script>
</body>
```

```html
        </html>
```

CSS CODE:

```css
.navbar
{
        overflow: hidden;
        background-color: #333;
    }
    .navbar a {
      float: left;
      display: block;
      color: white;
      text-align: center;
      padding: 14px 20px;
      text-decoration: none;
    }
    .navbar a.right {
      float: right;
    }
    .navbar a:hover {
      background-color: #ddd;
      color: black;
    }
```

PHP CODE:

```php
<?php echo file_get_contents("a.html");?>
```
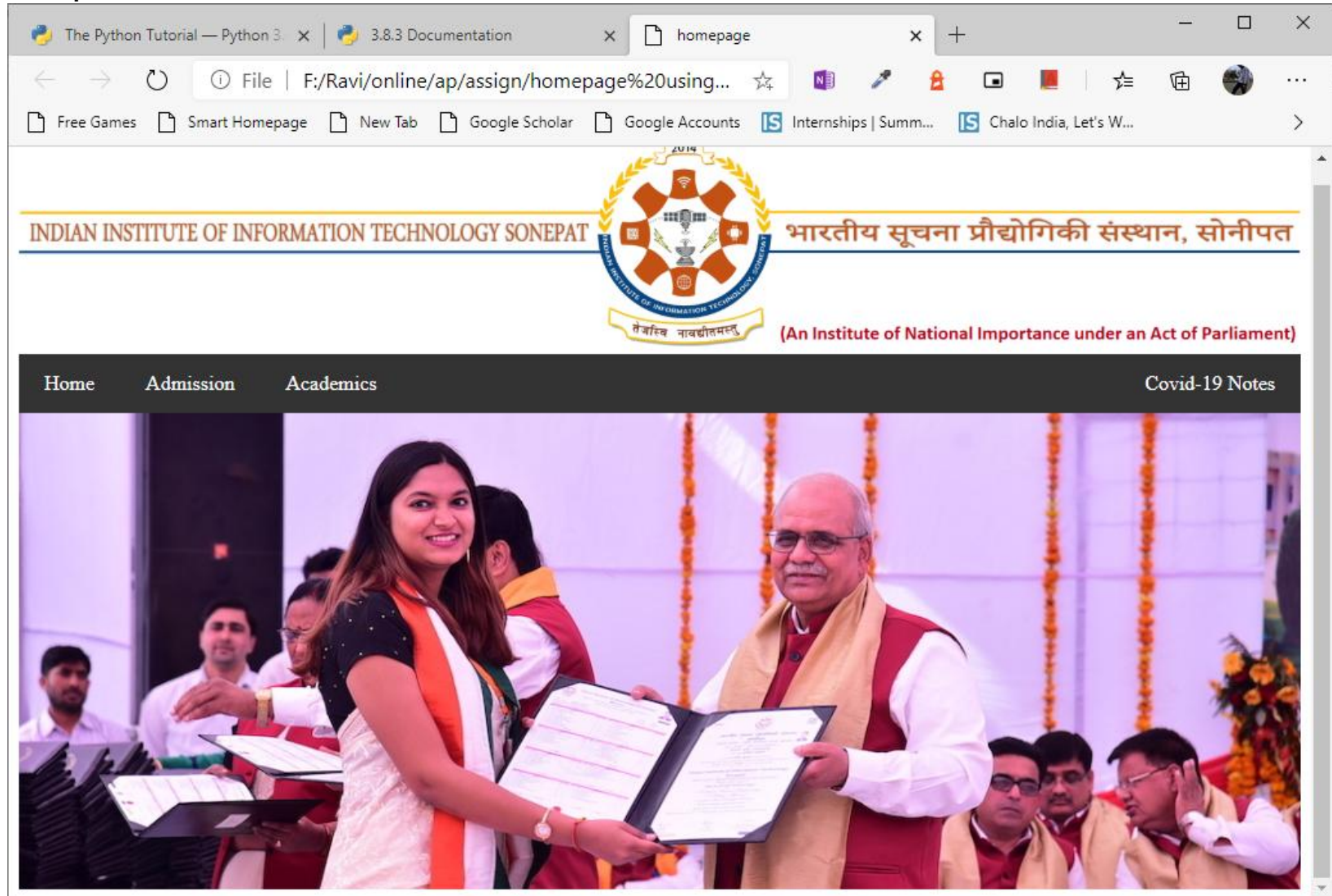
7 Write a program to understand the JavaScript

HTML CODE:

```html
<!DOCTYPE
html>
<html lang="en">
    <head>
        <title>Regular expression</title>
        <script>
            function validate()
            {
                var username=document.getElementById("uname").value;
                var regx=/ABC/;
                if(regx.test(username))
                {
                    alert("valid username");
                }
                else{
                    alert("invalid username");
                }
            }
        </script>
    </head>
    <body>
        <form action="message.html">
            <input id="uname" placeholder="username" type="text"/>
            <button onclick="validate()" type="button" >submit</button>
        </form>
    </body>
</html>
```

Output:
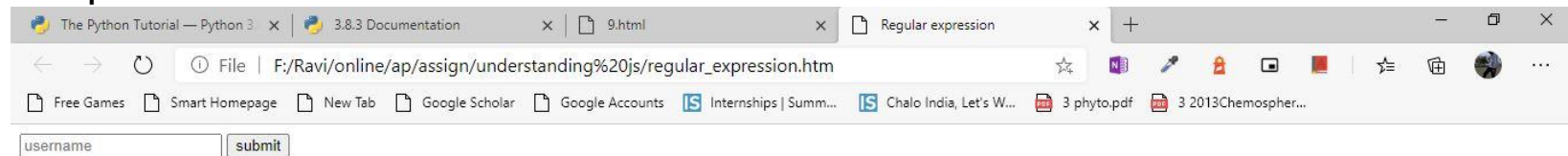
HTML CODE:

```html
<!DOCTYPE html>
<html lang="en">
    <head>
        <script>
            function create()
            {
                if(document.myform.username.value=="")
                {
                alert("enter some value");
                    return;
                }
                var cookievalue=escape(document.myform.username.value);
                document.cookie="name="+ cookievalue;
                document.write("setting cookie :"+"name=" + cookievalue)'
    }
        </script>
    </head>
    <body>
    <form name="myform">
    <input type="text" name="username"/>
    <input type="button" value="set cookie" onclick="create();"/>
    </form>
    </body>
```

```
</html>
```

Output:
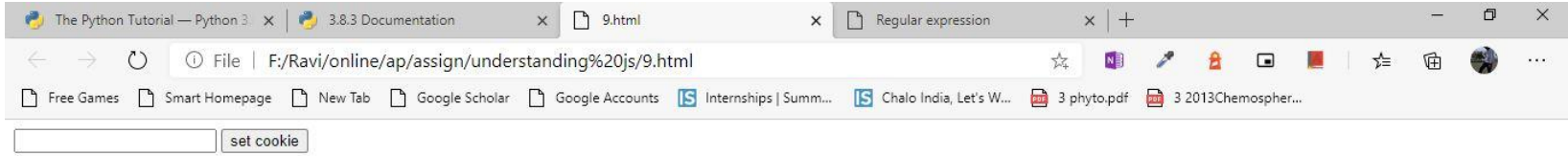
Create web application which has front-end in JS and back-end in PHP which runs from apache local server

Html code:

```php
<?php
        if(isset($_POST['submit']))
        {$usrnm=$_POST['username'];
        $pss=$_POST['password'];
            if((strlen($usrnm)<=5) or (strlen($pss)<=8) )
          {
            echo "Username must be 5 characters long and Password must be 8 characters long";
          }
        }
        ?>
        <html>
        <head>
        <title>Registration Form</title>
        <link rel="stylesheet" href="style.css">
        <script type="text/javascript" src="js.js">
        </script>
        </head>
        <body>
          <div class="a">
            <table width="100%">
              <th class="a"><h1>Registration Form</h1></th>
            </table>
                </div>
        <form method="POST" action=" " name="regform" onsubmit="return validate()">
        <fieldset>
        <div class="abc">
          <table width="100%">
        <th><label width="50%">Username:</label>
        <input type="text" placeholder="Enter your username here" name="username" ></th>
        <th><label>Password:</label>
        <input type="password" placeholder="Enter your password here"  name="password" id="a1"></th>
          </table>
          <br>
        </div>
        </fieldset>
        <hr>
        <fieldset>
          <legend><b>Personal details<b></legend>
          <table width="100%">
        <th><label>First Name:</label>
        <input type="text"  placeholder="Type your first name here" id="a2"></th>
        <th><label>Last Name:</label>
          <input type="text" placeholder="Type your last name here" >
```

```html
        </th>
        </table>
        <label class="abcd">Gender</label>
        <input type="radio" name="ab" value="male">Male
        <input type="radio" name="ab"  value="female">Female
        <input type="radio" name="ab"  value="others">Others
        <br>
        </fieldset>
        <hr>
        <fieldset>
          <legend><b>Contact Info</b></legend>
          <table width="100%">
            <th><label>E-mail:</label>
              <input type="email" id="a3"  placeholder="Enter your e-mail here" required></th>
            <th><label>Mobile No:</label>
            <input type="tel" id="a4"  placeholder="Enter your mobile number" pattern="[789][0-9]{9}" required></th>
          </table>
           <br>
          <fieldset>
            <legend><b>Address</b></legend>
            <table width="100%">
            <th><label>Permanent Address:</label>
            <br>
<textarea name="name" rows="5" cols="40" id="a5"  placeholder="Type your permanent address here"></textarea></th>
            <th><label>Correspondence Address:</label>
            <br>
            <textarea name="name" rows="5" cols="40" placeholder="Type your correspondence address here"></textarea></th>
            </table>
            </fieldset>
        </fieldset>
        <table width="100%">
        <th><input type="submit" value="Submit" name="submit"></th>
        <th><input type="reset"  value="Clear"></th>
        </table>
        </form>
        </body>
        </html>
```

CSS CODE:

```css
body{box-sizing:
border-box;
        border: 3px solid green;
        border-radius: 2px;
        background-color: SlatebLUE}
        legend{color: aqua;}
        .abc{text-align: center;
        margin: auto;}
```

```css
input[type=text],input[type=Password],input[type=email],textarea{background-color: lightgrey;}
input[type=radio]{margin-left:70px; }
.abcd{margin-left: 200px;}
input[type=submit],input[type=reset]{background-color: ;;
                    width:40%;
                  height: 30px;}
.a{ text-align: center;
background-color: grey;}
```

Javascript code:

```javascript
function
validate()
        { var a= document.getElementById('a1').value;
         var b=document.getElementById('a2').value;
         var c= document.getElementById('a3').value;
         var d=document.getElementById('a4').value;
         var e=document.getElementById('a5').value;
         var f=document.getElementById('ab').value;
        if(a==" " || a==0)
        {
          alert("Please Enter Password");
          return false;
        }
        if(b==" " || b==0)
        {
          alert("Please Enter First Name");
          return false;
        }
        if(c==" " || c==0)
        { alert("Please Enter a Valid E-mail");
        return false;}
        if(d==" " || d==0 || d.length<10)
        { alert("Please Enter a Valid Number");
        return false;}
        if(e==" ")
        { alert("Please Enter a valid address");
        return false;}
        }
        if(f==" ")
        { alert("Please Enter a valid gender");
        return false;}
        }
```

PHP CODE:

```php
<?php
    if(isset($_POST['submit']))
    {$usrnm=$_POST['username'];
    $pss=$_POST['password'];
        if((strlen($usrnm)<=5) or (strlen($pss)<=8) )
      {
```

```php
        echo "Username must be 5 characters long and Password must be 8 characters long";
    }
}
?>
```

Output:

Writing and understanding program in python

CODE:

```python
x = input("Type a number: ")
y = input("Type another number: ")
sum = int(x) + int(y)
print("The sum is: ", sum)
```

OUTPUT:

Using python libraries to do scientific calculations

CODE:

```python
import math
x = math.sqrt(64)
print(x)
y = pow(4, 3)
print(y
```

OUTPUT: