INDIAN INSTITUTE OF INFORMATION TECHNOLOGY SONEPAT

APPLICATION PROGRAMMING LAB FILE

BRANCH :-Information Technology

ROLL NUMBER :- 11912012

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SESSION 2019-20(SEMESTER 2)

Experiment 1 - Creating an HTML Web Pages forms

HTML File

```html
1    <!DOCTYPE html>
2    <html lang="en">
3
4    <head>
5        <meta charset="UTF-8">
6        <meta name="viewport" content="width=device-width, initial-scale=1.0">
7        <title>Formularz</title>
8        <link rel="Stylesheet" type="text/css" href="styleindex.css">
9
10   </head>
11
12   <body>
13       <div class="wrapper">
14
15           <form action="send.php" method="POST" name="registrationform">
16               <h1>Registration Form</h1>
17               <div class="name">
18                   <input type="text" placeholder="name" name="name" id="name" required>
19               </div>
20               <div class="surname">
21                   <input type="text" placeholder="surname" name="surname" id="surname" required>
22               </div>
23               <div class="position">
24                   <input type="text" placeholder="position" name="position" id="position" required>
25               </div>
26               <div class="mail">
27                   <input type="email" placeholder="mail" name="mail" id="mail" required>
28               </div>
29
30               <input type="submit" value="send">
31           </form>
32       </div>
33   </body>
34
35   </html>
```

CSS File

```css
.agreement {
    text-transform: none;
}

.name>input::placeholder,
.surname>input::placeholder,
.position>input::placeholder,
.mail>input::placeholder {
    text-transform: uppercase;
}

.name>input,
.surname>input,
.position>input,
.mail>input {
    display: block;
    height: 40px;
    line-height: 40px;
    width: 70%;
    margin: 10px auto;
}

.agreement+input {
    display: block;
    margin: 0 auto;
    width: 60%;
    padding: 10px 30px;
    font-size: 16px;
    font-weight: bold;
    text-transform: uppercase;
    letter-spacing: 2px;
    border-radius: 5px;
    border: none;
    box-shadow: none;
    background-color: rgb(19, 141, 211);
    color: white;
    cursor: pointer;
    transition: .3s;
}

.agreement+input:hover {
    background-color: rgb(19, 114, 160);
}
```

```
    margin: 0;
    padd1ng: 0;
    box-sizing: border-box;


body {
    background-color: rgb(19, 141, 211);


.wrapper {
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);


form {
    pa d d1 n g: 35 px;
    text-transform: uppercase;
    font-family: Arial, Helvetica, sans-serif;
    background-color: white;
    border-radius: 20px;
    color: #999;



    text-transform: uppercase;
    font-size: 22px;
    margin-bottom: 30px;
    text-align: center;
    color: #444;


.name,
.surname,
.position,
.agreement,
.mail {
    display: block;
    width: 100%;
    margin: 10px auto;



    background-color: rgb(19, 141, 211);
```

```
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    background-color: rgb(19, 141, 211);
}

.form {
    position: absolute;
    top: 50%;
    left: 50%;
    width: 500px;
    padding: 30px;
    transform: translate(-50%, -50%);
    font-family: Arial, Helvetica, sans-serif;
    background-color: white;
    border-radius: 20px;
    color: #444;
}

h1 {
    text-transform: uppercase;
    font-size: 22px;
    margin-bottom: 30px;
    text-align: center;
}

p {
    margin-bottom: 10px;
}
```

OUTPUT

Experiment 2 - Creating Home Page Using HTML

HTML Files

```html
<html>
<head>
<style>
 h1 {
    text-shadow: 2px 2px 5px purple;
 }
</style>
</head>
<body>
 <h1 style="text-align:center;">Assignment 2</h1>
 <h1>Submitted To - </h1>
 <h1>Mr. Md. Arquam</h1>
</body>
</html>
```

```html
<html>
<head>
<style>
 button
 {
 font-size:20px;
 }

 body  {
    background-image: url("img.jpg");
    background-color: #cccccc;
    background-size: cover;
 }
</style>
</head>
<body>
<center><div>
<p><button type="Home">Home</button>
 <button type="About">About</button>
 <button type="Admission">Admission</button>
 <button type="Acadmics">Acadmics</button>
 <button type="Acadmics">Examination</button>
 <button type="Acadmics">Placements</button>
 <button type="Acadmics">Students</button>
 <button type="Acadmics">Activities</button></p>
</div></center>
</body>
</html>
```

```
1   <html>
2   <head>
3   <style>
4   h1 {
5     text-shadow: 2px 2px 5px purple;
6   }
7   h3
8   {
9   text-shadow: 2px 2px 5px pink;
10  }
11  </style>
12  </head>
13  <body>
14  <h1>Student's Detail</h1>
15  <h3>Name-Anuj</h3>
16  <h3>Class-CSE</h3>
17  <h3>Roll No.-11912013</h3>
18  </body>
19  </html>
```

6.html 1.html 4.html 5.html index.html AP.html UnderstandingJavascript.html index.html

```
1   <html>
2   <head>
3   </head>
4   <body>
5   <center><img src="SOSOimage.png" height="95%" width="90%"></center>
6   </body>
7   </html>
```

OUTPUT

Experiment 3 - Creating XHTML and CSS and Understanding its use in creating web Pages

HTML Files

AP - Notepad

File Edit Format View Help

```css
.dv{ background-color:Lightgrey;
    margin: 0px 300px 300px 300px;}
    .abc{margin-left: 60px;}
input[type=email]{width:50%;
      margin-left: 60px;
    }
body{background-color:blue}
.ab{text-align: center;
    text-shadow: 5px;
  padding: 2px;
margin: auto;}
```

```html
31    <label class="abc"><b>Gender:</b></label>
32    <input type="radio" name="ab" value="male">Male
33    <input type="radio" name="ab" value="female">Female
34    <input type="radio" name="ab" value="others">Others
35    <br>
36    <br>
37    <br>
38    <br>
39    <label class="abc"><b>Mobile No:</b></label><br>
40    <table width="50%">
41      <th>
42      <select >
43        <option>Select</option>
44        <option>+91</option>
45         <option>+310</option>
46          <option>+55</option>
47           <option>+1</option>
48           <option>+355</option>
49           <option>+2</option>
50      </select></th>
51      <th>
52      <input type="text" placeholder="Enter your Mobile number "></th>
53    </table>
54    </div>
55    <hr>
56    <table width="30%">
57      <th><input type="submit"  value="Register"></th>
58      <th><input type="reset"  value="Clear"></th>
59    </table>
60    </form>
61    </div>
62    </div>
63    </body>
64    </html>
65
```

C:\Users\anujs\OneDrive\Desktop\New\3). Creating XHTML and CSS and understanding its use in creating web pages\AP.html - Notepad++

File   Edit   Search   View   Encoding   Language   Settings   Tools   Macro   Run   Plugins   Window   ?

index.html   body.html   navigation.html   header.html   footer.html   footer.html   nsfg.py   Output.html   6.html   1.html   4.html   5.html   ind

```
 1   <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
 2   "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
 3   <html lang="en" dir="ltr">
 4     <head>
 5        <title>Registration Form</title>
 6        <link rel="stylesheet" href="AP.css">
 7     </head>
 8     <body>
 9        <div class="ab">
10   <h1>Create Your Account</h1></div>
11
12        <div>
13           <div class="dv">
14   <form method="post">
15     <table width="50%">
16        <th><label>First Name</label>
17        <input type="text" placeholder="Enter your Firstname here"></th>
18        <th><label for="">Last Name</label>
19        <input type="text" placeholder="Enter your Lastname here"></th>
20     </table>
21     <br>
22     <br>
23     <div>
24        <label class="abc"><b>E-mail:</b></label>
25   <br>
26   <input type="email" placeholder="Enter your email here">
27   <br>
28   <br>
29   <br>
30   <br>
31   <label class="abc"><b>Gender:</b></label>
32   <input type="radio" name="ab" value="male">Male
33   <input type="radio" name="ab" value="female">Female
34   <input type="radio" name="ab" value="others">Others
35   <br>
36   <br>
37   <br>
38   <br>
```

OUTPUT
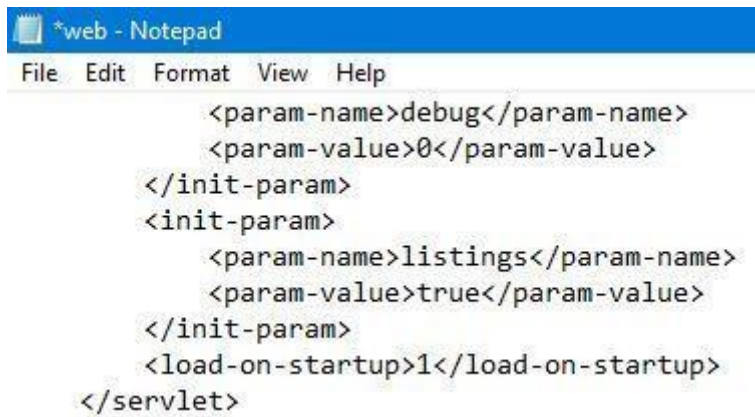
Experiment 4 - Setting up and configuration of Apache Tomcat Server

```
            <param-name>debug</param-name>
            <param-value>0</param-value>
        </init-param>
        <init-param>
            <param-name>listings</param-name>
            <param-value>true</param-value>
        </init-param>
        <load-on-startup>1</load-on-startup>
    </servlet>
```

Name	Date modified	Type	Size
bin	07-06-2020 03:39 PM	File folder	
conf	07-06-2020 03:43 PM	File folder	
lib	07-06-2020 03:39 PM	File folder	
logs	07-06-2020 03:43 PM	File folder	
temp	07-06-2020 03:39 PM	File folder	
webapps	07-06-2020 03:39 PM	File folder	
work	07-06-2020 03:43 PM	File folder	
LICENSE	06-05-2020 03:42 AM	File	57 KB
NOTICE	06-05-2020 03:42 AM	File	2 KB
RELEASE-NOTES	06-05-2020 03:42 AM	File	8 KB
tomcat	06-05-2020 03:42 AM	Icon	22 KB
Uninstall	06-05-2020 03:42 AM	Application	80 KB
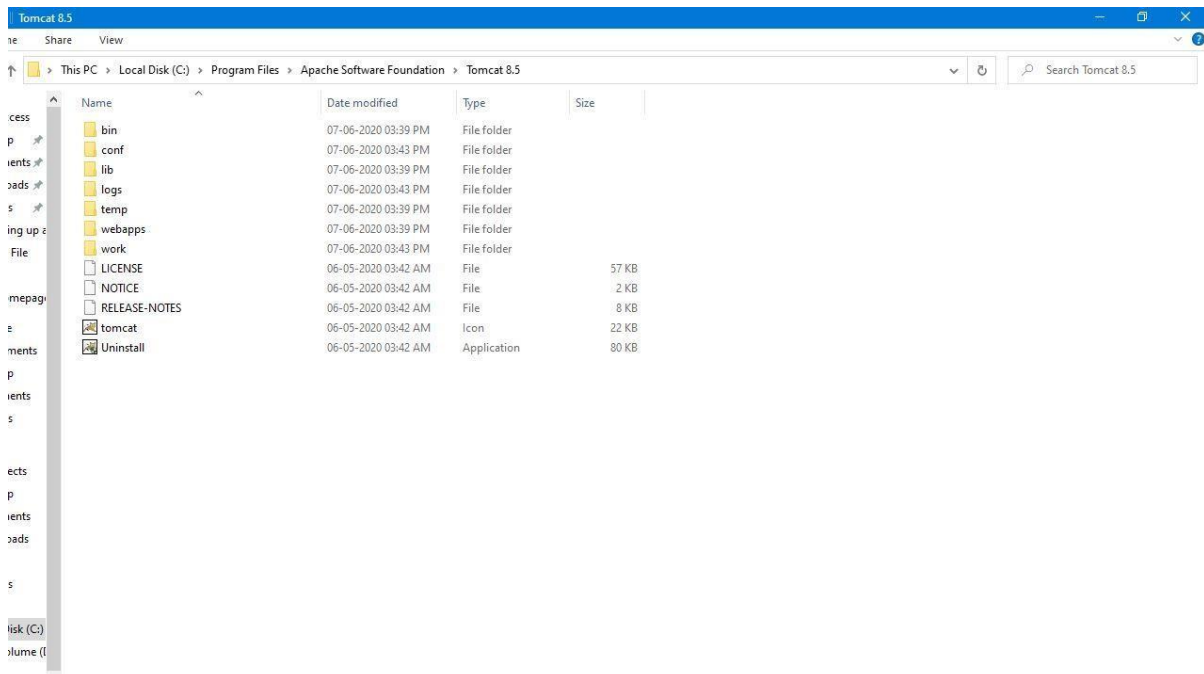
@ Coca ihost

Ap ps   Cmail   ' \ouTube   JavaScript Tutorial @ DSSSB Exam Coachi...   Python Tutorial   C + + .Frog °aa ming...

Ei

This site can't be reached

localhost refuse d t con neck.

- Checking the connection
- Checking the proxy and the firewall

Reload

```
‹!-- A "Connector" represents an endpoint by which requests are received
    and responses are returned. Documentation at :
    Java HTTP Connector: /docs/config/http.html
    Java AMP  Connector: /docs/config/ajp.html
    APR (HTTP/AJP) Connector: /docs/apr.html
    Define a non-SSL/TLS HTTP/1.1 Connector on port 9999

<Connector  port="9999"  pPOfDCD1-"HTTP/1.1"
            connec th onT ice out=" 20B00 "
            redirectPo rt=" 8443 " /›
<!-- A "Connector" using the shared thread pool-->

DConnector  executor-"tomcatThreadPoo1"
            po rt=" 9999 " protoco1="HTTP/1. 1 "
            connec IN onTioeout = " 20B00 "
            redirectPor I=" 8443"  /›
```

Apache Tomcat Examples

- Sm lets examples
- JSP Examples
- \Veb5ocket Examples

Apache Tomcat/8.5.55   ×   +

← → C   ⓘ localhost:9999   ☆

▦ Apps ✉ Gmail ▶ YouTube 🔵 JavaScript Tutorial 🟠 DSSSB Exam Coachi... 🟢 Python Tutorial C++ Programming... Python Programmi... M How to install a mis...

Home Documentation Configuration Examples Wiki Mailing Lists   Find Help

Apache Tomcat/8.5.55   APACHE SOFTWARE FOUNDATI
                                                           http://www.apache.o

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

Recommended Reading: Server Status
Security Considerations How-To
Manager Apolicafion How-To
Clustering/Session Reolication How-To   Host Manager

Developer .Quick Start

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

Managing Tomcat   Documentation   Getting Help

For security, access to the manager webapp is   Tomcat 8 5 documentation   FAQ and Mailing Lists
restricted. Users are defined in: Tomcat 8 5 Configuration   The following mailing lisls are avail a'bl'e.
$CATALINA_HOME/conf/tomcat-users.xml1   Tomcat Wiki
                                                                            tomcat-announce
In Tomcat 8.5 access to the manager   Find additional important configuration   Important announcements, releases, security
application is split between different users   information in: vulnerability notifications (Low volume).
Read more
                                                                            tomcat-users.
Release Notes
                                                Deveiooers may 'De interested in   lagliosuvei.
Changelog   User suppon and d ecus sion Tor Apache "ag Ds.

localhost:9999/docs/o Mtoratioñ Cutde   Oevelopment mailing list, menuding commtl

```
<!-- The contents of this file will be loaded for each web application -->
<Context reloadable="true">

    <!-- Default set of monitored resources. If one of these changes, the   -->
    <!-- web application will be reloaded.                                   -->
    <WatchedResource>WEB-INF/web.xml</WatchedResource>
```

```
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
```

Experiment 5 - Understanding modification of Web.XML

The web.xml Deployment Descriptor file describes how to deploy a web application in a servlet container such as Tomcat.

This file is required for every application you deploy on Tomcat. You will find one in the jsp-examples, servlet-examples and ROOT applications provided on a new Tomcat website, and every web application example you download, including inside WAR files.

The location of the file is always the same: application root/WEB-INF/web.xml

At minimum, the file needs to contain an XML descriptor and an opening and closing <web-app> tag.
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:

```
*web - Notepad
File   Edit   Format   View   Help

            <param-name>debug</param-name>
            <param-value>0</param-value>
        </init-param>
        <init-param>
            <param-name>listings</param-name>
            <param-value>true</param-value>
        </init-param>
        <load-on-startup>1</load-on-startup>
    </servlet>
```

Experiment 6 - Creating Web Sites Using PHP

PHP Files


```php
<?php

    session_start();
    $conn =  mysqli_connect("localhost","root","","db");
    if(!$conn)
    {
        die("Connection failed" .mysqli_connect_error());
    }
    $username = $_POST['restroid'];
    $password = $_POST['password'];
    $button = $_POST['btn'];
    $check = "SELECT * FROM restro WHERE Username = '$username' AND Password = '$password'";
        $qu = mysqli_query($conn,$check);
    $rows = mysqli_num_rows($qu);
    $name = mysqli_fetch_assoc($qu);
?>
<?php
    if($rows>0){
        $_SESSION['ifLogin'] = "true";    // Setting the Restaurant's login Session Variable
        $_SESSION['restroId'] = $username;     // Setting the Restaurant's Id Session Variable
        $_SESSION['restroName'] = $name['RestroName'];  // Setting the Restaurant's Name Session Variable
?>
<html>

<body>
<script>
    alert("Login Successfull!!");
    window.location.href = "restro1.php";   //Redirecting to Restaurant's main page
</script>
<?php }
    else{
        $_SESSION['ifLogin'] = "false";    //Setting the Restaurant's login Session Variable to be False
    ?>
<script>
alert('Wrong Credential!!');
window.location.href = "restro1.php"
</script>
<?php
    }
    ?>
    </body>
    </html>
```

```html
34  <body>
35      <nav class="navbar navbar-expand-lg navbar-light bg-info">
36          <a class="navbar-brand" href="#">FoodShala</a>
37          <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" ar
38          <span class="navbar-toggler-icon"></span>
39      </button>
40
41          <div class="collapse navbar-collapse" id="navbarSupportedContent">
42              <ul class="navbar-nav mr-auto">
43                  <li class="nav-item active">
44                      <a class="nav-link" href="#">Home <span class="sr-only">(current)</span></a>
45                  </li>
46              </ul>
47          </div>
48      </nav>
49      <div class="front1">
50      <h1 class="label">
51          Welcome To FoodShala, You want to
52      </h1>
53
54          <form action="user.php" method="GET">
55
56              <button type="submit" class="btn btn-primary">Order Food</button>
57          </form>
58      <form action="restro1.php" method="GET">
59          <button type="submit" class="btn btn-primary">Manage Your Restaurant</button>
60      </form>
61      </div>
62  </body>
63
64  </html>
```

```html
1   <html>
2
3   <head>
4       <title>FoodShala</title>
5
6       <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/d
7       <style>
8           .label {
9               align-content: center;
10              color: white;
11              align-content: center;
12          }
13
14          body {
15              background-image: url('images/lily.jpg');
16              background-repeat: no-repeat;
17              background-attachment: fixed;
18              background-position: center;
19              background-size: cover;
20          }
21
22          .front1{
23              margin: auto;
24              width: 50%;
25              padding: 10px;
26              text-align: center;
27              margin-top: 200px;
28          }
29
30
31      </style>
32  </head>
33
34  <body>
35      <nav class="navbar navbar-expand-lg navbar-light bg-info">
36          <a class="navbar-brand" href="#">FoodShala</a>
37          <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria
38          <span class="navbar-toggler-icon"></span>
39      </button>
40
41          <div class="collapse navbar-collapse" id="navbarSupportedContent">
42              <ul class="navbar-nav mr-auto">
43                  <li class="nav-item active">
```

OUTPUT

FoodShala   Home

Order Food

Manage Your Restaurant

Warning: mysqli_connect(): (HY000/1049): Unknown database 'db' in **C:**   line **3**

Warning: mysqli_query() expects parameter 1 to be mysqli, bool given in   on line **5**

FoodShala   Home   Menu   Signup   Login

Warning: mysqli_fetch_assoc() expects param   \FoodDeliveryApp-master\user.php on line
197

SignUp   ×

First Name

First Name

Last Name

Last Name

UserName

Your UserName

Email

Your Email

Password

Password

Your Food Preference

Veg/Non-Veg

SignUp

Experiment 7 - Understanding JavaScript

Java Script File

```
1    <!DOCTYPE html>
2    <html>
3    <head>
4        <title>Regular Expression</title>
5        <center>
6        <script type="text/javascript">
7            function validate()
8            {
9                var username=document.getElementById("uname").value;
10               var regx=/A00/;
11               if(regx.test(username))
12               {
13                   alert("valid username");
14               }
15               else
16               {
17                   alert("Invalid username");
18               }
19           }
20       </script>
21       </center>
22   </head>
23   <body>
24   <form action="message.html">
25       <input type="text" id="uname" placeholder="username"/>
26       <button onclick="validate()">Submit</button>
27   </form>
28
29   </body>
30   </html>
31
```

OUTPUT

Experiment 8 - Creating a Web Page with back end in PHP and Front end in JavaScript and hosting it on Apache Tomcat Server

PHP File

```
‹ input type=" text" id=" st we am" name=" st we am" pequ? ped›
```

```
<label for="sem"><span class="mand">*</span>Semester: </label>
‹ la beI for= " contac I" › ‹ span c la s s=" ma nd" › * ‹/ spa n › con tae t Humb e c: ‹ / la be I ›
‹ label -for=" s kit T" › ‹ span c Pass="mand" ›" ‹/ span›Youn s kit T s: ‹/ Gabe T›
‹texta pea id=" ski T1" pas=" 7" c ads=" 76" p Tae eholde p=" Te T T us you p Sk? T s in pnogpamm ing! " ›
```

```
onmouseout="offconf();"><br>
```

```
echo "<h1> ".$name."</h1>";

echo "<h3>E-mail: ".Semail."</ha>";
?>
</div>

    </body>
</html>
```

```
            function marq()
            {
                return ((new Date().getDate()).toString());
            }

        </script>
    </head>

    <body style="background-color:red">
        <h1>Registration Form</h1>

        <?php
$name = $email = $gender = $comment = $website = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {
  $name = test_input($_POST["name"]);
  $email = test_input($_POST["email"]);
  $institution = test_input($_POST["institution"]);
  $course = test_input($_POST["course"]);
  $stream = test_input($_POST["stream"]);
}
```

```
        method="post" action="#after" id="form_box">

        <label for="name"><span class="mand">*</span>Name: </label>
        <input type="text" id="name"  name="name" required><br><br>

        <label for="email"><span class="mand">*</span>Email-Id: </label>
        <input type="email" id="email" name="email"  required><br><br>

        <label for="institution"><span class="mand">*</span>Institution: </label>
        <input type="text" id="institution" name="institution" required><br><br>

        <label for="dob"><span class="mand">*</span>Date of birth: </label>
        <input type="date"  id="dob" name="dob" required><br><br>

        <label for="course"><span class="mand">*</span>Course </label>
        <select id="course" name="course" required>
            <option value="B.Tech">B.Tech</option>
            <option value="M.Tech">M.Tech</option>
            <option value="PhD">PhD</option>
```

```
        alert("you must enter your stream");

    var n=document.getElementById("sem").value;
        if(!isNaN(parseFloat(n)) && isFinite(n))
            {e.preventDefault();
            alert("you must enter your semester"); }
    var fieldValue=document.getElementById("con").value;




        document.getElementById("conf").innerHTML=" ";
```

AP LAB - N otepad

File E d I Format Vi ew He a

```
input:visited{


input:active{
    border: lpx solid rgb(131, 8, 8);

#btn{
    b a rd en: 2px s oL? d rgb (5 00, 0, 0);
    z- Andex:  9999;
    paddi ng: 5px 5pxj
    border-radius: 5px;
    transition: background-color 0.2s, color 0.2s;

#btn:hover,
#btn:active{


    banden- nad?us : 5air;
    paddi ng: 5px 5pxj
    c u ns an: poi nte n;




textarea:visited{
    border: lps solid white;

texta sea:hover,

    border: lps solid rgb(l3l, 8, 8);

</style>



va r No rm Exa rrpL e = d ocumen I . get El efren tBy I d ( "fo rm_b ax" ;
 formExample.submit();

dacumenI .geI ENem entBy I d ( "to mm box" ) .onsubmdI -  I unctt on(e){
    va r +TeLd VaLue-d ocumenI .geI ELementBy I d ( "n ame" ) . vaLue;
        i I ( fi eL d Va L u e==n uL I | +T eLd Va L u e== " " )
```

```
<!DOCTYPE html>
<html>
    <head>
        <title>Registeration Form</title>
        <style type="text/css">
        *{
            box-sizing: border-box;
            text-align: center;
            font-family:  Comic Sans MS;
        }
        body{
            background-color: rgb(50, 68, 68);
            background-attachment: fixed;
            background-position: center;
            background-size: cover;
            /* background-repeat:round; */

        }
        h1{
            color: white;
            background-color: rgb(500, 29, 29);
            font-family: Comic Sans MS;
        }
        #form_box{
            margin-left: 10%;
            margin-right: 10%;
            padding: 5% 10%;

            text-align: left;
            border: 2px solid rgb(63, 7, 7);
            border-radius: 5px;
            background-color: white;
            z-index: 999;
            font-family:  Comic Sans MS;
        }
        .mand{
            color: rgb(500, 0, 0);
        }
        h6{
            color: white;

            z-index: 2;
            font-family: Comic Sans MS;
        }
        input:link,
        input:visited{
            border: 1px solid white;
        }
```

OUTPUT

Experiment 9 - Writing and Understanding Program in Python

Python File

Experiment 10 - Use python Libraries like Math's statistics to create program for Scientific Computations

Python File

```python
In [10]:   import pandas as pd
           import numpy as np
           import matplotlib.pyplot as plt
           import seaborn as sns
           %matplotlib inline
           from sklearn.datasets import load_iris
           a=load_iris()
           a
```

```
Out[10]:   {'data': array([[5.1, 3.5, 1.4, 0.2],
                   [4.9, 3. , 1.4, 0.2],
                   [4.7, 3.2, 1.3, 0.2],
                   [4.6, 3.1, 1.5, 0.2],
                   [5. , 3.6, 1.4, 0.2],
                   [5.4, 3.9, 1.7, 0.4],
                   [4.6, 3.4, 1.4, 0.3],
                   [5. , 3.4, 1.5, 0.2],
                   [4.4, 2.9, 1.4, 0.2],
                   [4.9, 3.1, 1.5, 0.1],
                   [5.4, 3.7, 1.5, 0.2],
                   [4.8, 3.4, 1.6, 0.2],
                   [4.8, 3. , 1.4, 0.1],
                   [4.3, 3. , 1.1, 0.1],
                   [5.8, 4. , 1.2, 0.2],
                   [5.7, 4.4, 1.5, 0.4],
                   [5.4, 3.9, 1.3, 0.4],
                   [5.1, 3.5, 1.4, 0.3],
                   [5.7, 3.8, 1.7, 0.3],
                   [5.1, 3.8, 1.5, 0.3]
```

```python
In [11]:   a.data
```

```
Out[11]:   array([[5.1, 3.5, 1.4, 0.2],
                   [4.9, 3. , 1.4, 0.2],
                   [4.7, 3.2, 1.3, 0.2],
                   [4.6, 3.1, 1.5, 0.2],
```

```python
In [20]:   df['Target']=a.target
           df
```

Out[20]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)	Target
0	5.1	3.5	1.4	0.2	0
1	4.9	3.0	1.4	0.2	0
2	4.7	3.2	1.3	0.2	0
3	4.6	3.1	1.5	0.2	0
4	5.0	3.6	1.4	0.2	0
...	...	...	...	...	...
145	6.7	3.0	5.2	2.3	2
146	6.3	2.5	5.0	1.9	2
147	6.5	3.0	5.2	2.0	2
148	6.2	3.4	5.4	2.3	2
149	5.9	3.0	5.1	1.8	2

150 rows × 5 columns

```python
In [22]:   X=df.drop('Target',axis='columns')
           X
```

Out[22]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)
0	5.1	3.5	1.4	0.2
1	4.9	3.0	1.4	0.2
2	4.7	3.2	1.3	0.2
3	4.6	3.1	1.5	0.2
4	5.0	3.6	1.4	0.2

```python
In [19]:   df=pd.DataFrame(data=a.data,columns=a.feature_names)
           df
```

Out[19]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)
0	5.1	3.5	1.4	0.2
1	4.9	3.0	1.4	0.2
2	4.7	3.2	1.3	0.2
3	4.6	3.1	1.5	0.2
4	5.0	3.6	1.4	0.2
...	...	...	...	...
145	6.7	3.0	5.2	2.3
146	6.3	2.5	5.0	1.9
147	6.5	3.0	5.2	2.0
148	6.2	3.4	5.4	2.3
149	5.9	3.0	5.1	1.8

150 rows × 4 columns

```python
In [20]:   df['Target']=a.target
           df
```

Out[20]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)	Target
0	5.1	3.5	1.4	0.2	0
1	4.9	3.0	1.4	0.2	0
2	4.7	3.2	1.3	0.2	0
3	4.6	3.1	1.5	0.2	0
4	5.0	3.6	1.4	0.2	0

```
In [12]:  ▶ a.keys()
    Out[12]: dict_keys(['data', 'target', 'target_names', 'DESCR', 'feature_names', 'filename'])

In [13]:  ▶ a.target
    Out[13]: array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
             0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
             0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
             1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
             1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
             2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
             2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2])

In [14]:  ▶ a.target_names
    Out[14]: array(['setosa', 'versicolor', 'virginica'], dtype='<U10')

In [15]:  ▶ a.feature_names
    Out[15]: ['sepal length (cm)',
             'sepal width (cm)',
             'petal length (cm)',
             'petal width (cm)']

In [16]:  ▶ print(a.DESCR)

           .. _iris_dataset:

           Iris plants dataset
           --------------------

           **Data Set Characteristics:**

               :Number of Instances: 150 (50 in each of three classes)
               :Number of Attributes: 4 numeric, predictive attributes and the class
```
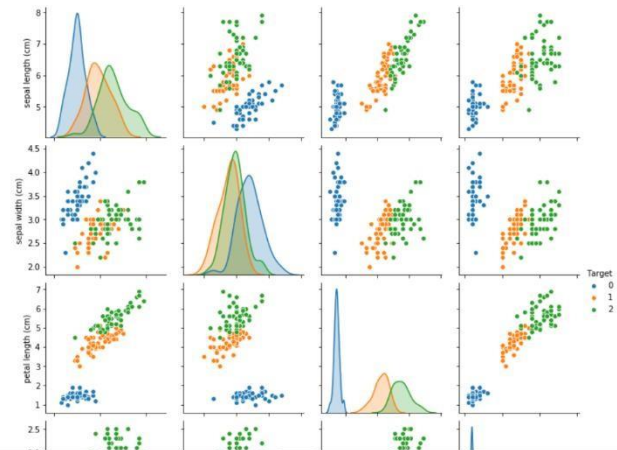
```
In [24]:  ▶ sns.pairplot(df,hue='Target')
    Out[24]: <seaborn.axisgrid.PairGrid at 0x2d8174fafc8>
```


OUTPUT

gj •l• 8< @ @ •h l   N Run M C ' Code   ▾   ▣

In [24] : N   `s n s . pa Mr plot (df, h ue= ' Ta r get ' )`

Out [24] : ‹ s ea bor n . axis gr id . Pa 1rG r id at 0x2d8 174fa fc 8›