Indian Institute of Information Technology Sonepat

AP LAB FILE

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BRANCH- CSE

PROGRAM 1

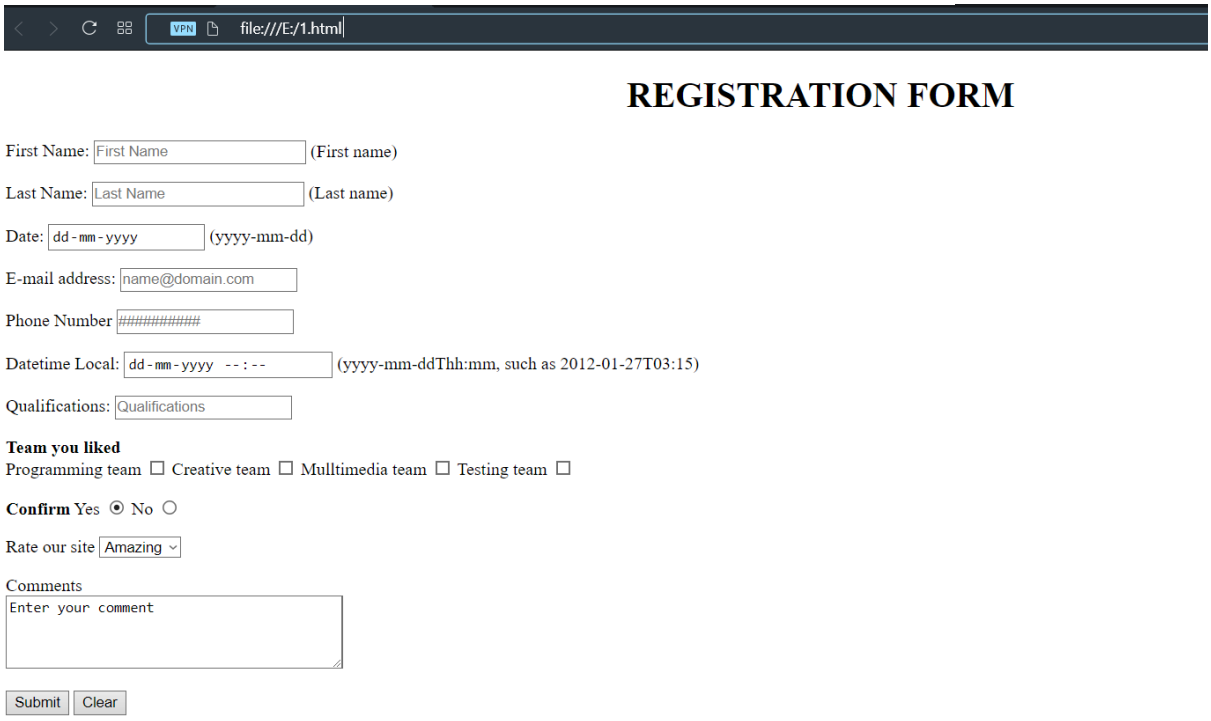
```
<!DOCTYPE  html>
<html lang="en" dir="ltr">
<head>
<meta charset="utf-8">
<title>Register</title>
</head>
<body>
<center><h1>REGISTRATION FORM</h1></center>
<h5><time></time></h5>
<feildset>
<form     action="meta.html"   method="post"
autocomplete="on">
<!--hidden   input   type   contains   hidden
information that will also be processed in
action browser-->
<input    type="hidden"    name="recipient"
value="">

<input type="hidden" name="subject" value="">

<input     type="hidden"     name="redirect"
value="">

<!--input type text inserts a text feild to
be input by user-->


<p><feildset><label>First Name:
<input type="text" placeholder="First Name"
id="firstname"name="name"          size="25"
maxlength="30">
</label>(First name)</feildset></p>


<p><label>Last Name:
<input type="text" placeholder="Last Name"
id="lastname"name="name"          size="25"
maxlength="30">
</label>(Last name)</p>
<p>
<label>Date:
```

```
<input type="date"/>
(yyyy-mm-dd)
</label>
</p>
<p><label>E-mail address:
<input      type="email"      name="details"
placeholder="name@domain.com"
required></label>
</p>
<p><label>Phone Number
<input       type="tel"       name="details"
placeholder="##########"    pattern="\d{10}"
required></label>
</p>
<p>
<label>Datetime Local:
<input type="datetime-local"/>
(yyyy-mm-ddThh:mm, such as 2012-01-27T03:15)
</label>
</p>
<p>
<label for="txtList">Qualifications:
<input        type="text"        id="txtList"
placeholder="Qualifications"
list="Qualifications">
<datalist id="Qualifications">
<option value="Matric">
<option value="High School">
<option value="UG">
<option value="PG">
</datalist>
</label>
</p>
<p>
<strong>Team you liked</strong><br>
<label>Programming team
<input  type="checkbox"  name="teamselection"
value="programming">
</label>
<label>Creative team
<input  type="checkbox"  name="teamselection"
value="creative">
```

```
</label>
<label>Mulltimedia team
<input type="checkbox" name="teamselection"
value="multimedia">
</label>
<label>Testing team
<input type="checkbox" name="teamselection"
value="testing">
</label>
</p>
<p>
<strong>Confirm</strong>
<label>Yes
<input type="radio" name="confirmation"
value="yes" checked>
</label>
<label>No
<input type="radio" name="confirmation"
value="no">
<!--name class must be same in a given
paragraph-->
</label>
</p>
<p>
<label>Rate our site
<select name="rating">
<option selected>Amazing</option>
<option>10</option>
<option>9</option>
<option>8</option>
<option>7</option>
<option>6</option>
<option>5</option>
<option>4</option>
<option>3</option>
<option>2</option>
<option>1</option>
<option>Awful</option>
</select>
</label>
</p>
<p>
```

```
<label>
Comments<br>
<textarea      name="comments"      rows="4"
cols="40">Enter your comment</textarea>
</label>
</p>
<p>
<input type="submit"  value="Submit">
<input type="reset"  value="Clear">
</p>
</form>
</feildset>
</body>
</html>
```

OUTPUT:



PROGRAM-2

```
<html>
    <head>
        <title>Hello World!!</title>
        <style type ="text/css">
            #h1 {
                text-decoration-color: rgb(57, 99, 238);
            }
            #h2 {
                text-emphasis-color: rgb(84, 119, 226);
                position: relative;
                left: 2000px;
            }
            body {
                margin: 0px 0px 0px 0px;
                background-color: black;
                color: aliceblue ;
            }
            #frame {
                padding-top: 50px;
                padding-right: 10px;
            }
            #earth {
                border-radius: 300px;
                float: center;
                padding-left: 10px;
            }
```

```
#whole {
background-color: gray;
border-radius: 12px;
margin: 0px 100px 0px 100px;
padding-left: 10px;
padding-bottom: 10px;
padding-right: 10px;
padding-top: 50px;

}
#about-earth {
     text-align: center;
     text-size-adjust:150%;
}
#ribon {
     position: fixed;
     background-color: lightslategray;
     border-radius: 20px;
     margin-left: auto;
     margin-right: auto;
     width: 100%;
     text-align: center;
     font-size: large;
}
#button {
     border-radius: 10px;
```

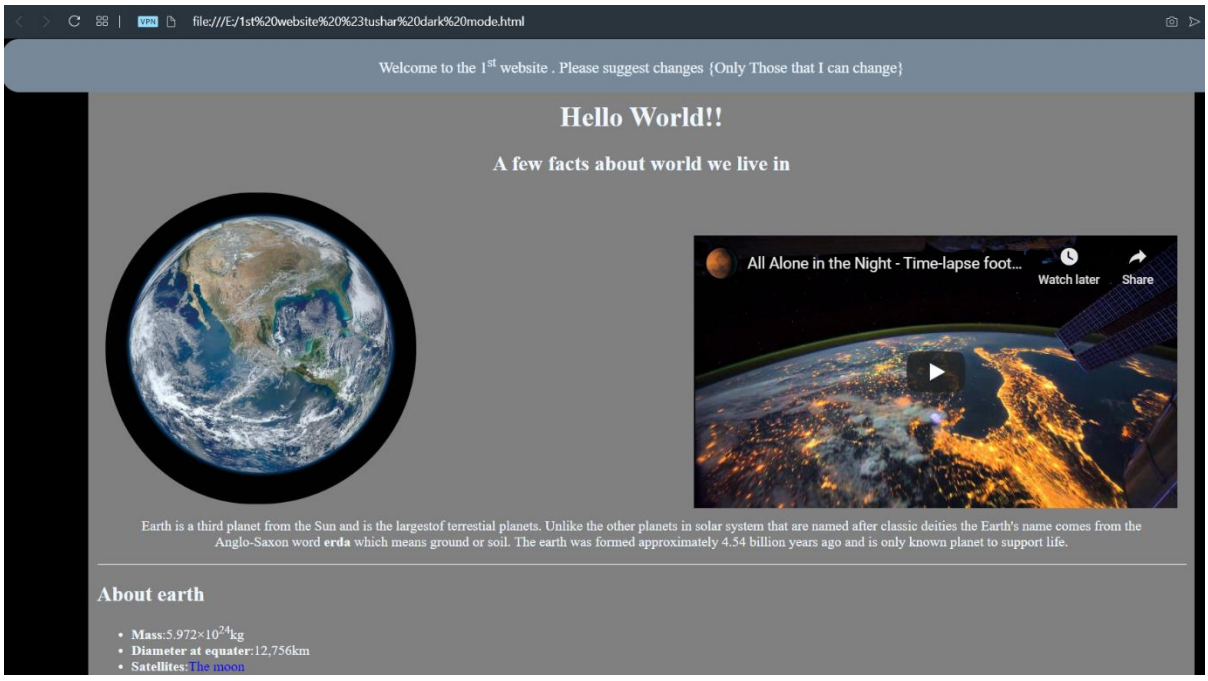
```
                    font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
                    font-weight: 200;
                    background-color: dodgerblue;
                    height: 7%;
                    width: 7%;
               }
               #button:hover {
                    background-color: darkblue;
                    color: antiquewhite;
               }
               #moon {
                    text-decoration: none;
               }
               #moon:hover {
                    color:darkblue;
                    text-decoration: underline;
                    text-transform: uppercase ;
               }
          </style>
     </head>
     <body>
          <div id="ribon"><p>Welcome to the 1<sup>st</sup> website . Please suggest changes &#123Only Those that I can change&#125</p></div>
     <div id="whole"><p id="h1"><h1 align="center">Hello World!!</h1></p>
     <p id="h2"><h2 align="center">A few facts about world we live in</h2></p>
```

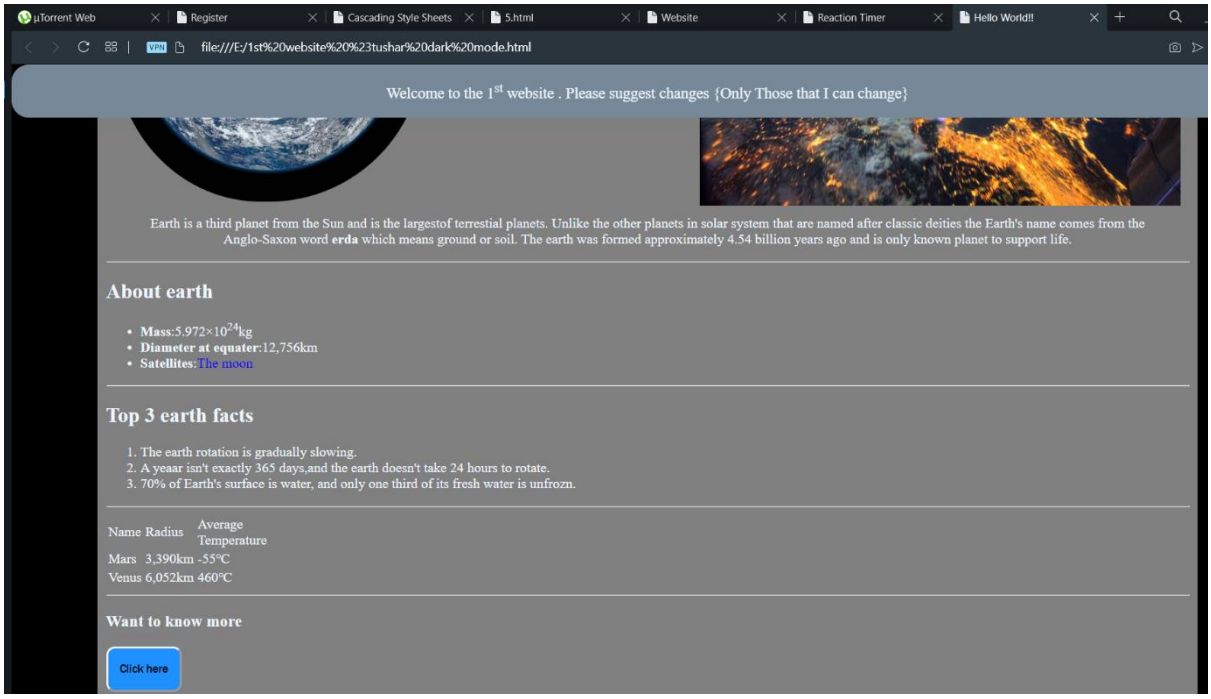
```
    <iframe id="frame" width="560" height="315" src="https://www.youtube.com/embed/FG0fTKAqZ5g" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen align="right"></iframe>

    <p><img id="earth" src="https://cdn.britannica.com/25/160325-050-EB1C8FB7/image-instruments-Earth-satellite-NASA-Suomi-National-2012.jpg" height="360" width="360"></p>

    <p id="about-earth">Earth is a third planet from the Sun and is the largestof terrestial planets. Unlike the other planets in solar system that are named after classic deities the Earth's name comes from the<br>

    Anglo-Saxon word <strong>erda</strong> which means ground or soil. The earth was formed approximately 4.54 billion years ago and is only known planet to support life.

    <hr>

    <h2>About earth</h2>

    <ul>

        <li><b>Mass</b>:5.972&#215;10<sup>24</sup>kg

        <li><b>Diameter at equater</b>:12,756km</li>

        <li><b>Satellites</b>:<a id="moon" href="https://en.wikipedia.org/wiki/Moon">The moon</a>

    </ul>

    <hr>

    <p><h2>Top 3 earth facts</h2></p>

    <ol>

        <li>The earth rotation is gradually slowing.</li>

        <li>A yeaar isn't exactly 365 days,and the earth doesn't take 24 hours to rotate.</li>

        <li>70&#37; of Earth's surface is water, and only one third of its fresh water is unfrozn.</li>
```

```
     </ol>
     </ul>
<hr>
     <table>
          <tbody>
               <thead>
                    <tr>
                         <td>Name</td>
                         <td>Radius</td>
                         <td>Average<br>Temperature</td>
                    </tr>
               </thead>
                    <tr>
                         <td>Mars</td>
                         <td>3,390km</td>
                         <td>-55&#8451</td>
                    </tr>
                    <tr>
                         <td>Venus</td>
                         <td>6,052km</td>
                         <td>460&#8451</td>
                    </tr>
          </tbody>
     </table>
<hr>
<p><h3>Want to know more</h3></p>
```

```
<p><form     action="https://www.livescience.com/19102-amazing-facts-earth.html">
          <input  id="button"  type="submit"  value="Click  here"  target="_blank">
     </form></p></div>
     </body>
</html>
```

OUTPUT:


file:///E:/1st%20website%20%23tushar%20dark%20mode.html
Welcome to the 1st website . Please suggest changes {Only Those that I can change}
Hello World!!
A few facts about world we live in
All Alone in the Night - Time-lapse foot...
Watch later
Share
Earth is a third planet from the Sun and is the largestof terrestial planets. Unlike the other planets in solar system that are named after classic deities the Earth's name comes from the Anglo-Saxon word erda which means ground or soil. The earth was formed approximately 4.54 billion years ago and is only known planet to support life.
About earth
Mass:5.972×10^24kg
Diameter at equater:12,756km
Satellites:The moon


µTorrent Web
Register
Cascading Style Sheets
5.html
Website
Reaction Timer
Hello World!!
file:///E:/1st%20website%20%23tushar%20dark%20mode.html
Welcome to the 1st website . Please suggest changes {Only Those that I can change}
Earth is a third planet from the Sun and is the largestof terrestial planets. Unlike the other planets in solar system that are named after classic deities the Earth's name comes from the Anglo-Saxon word erda which means ground or soil. The earth was formed approximately 4.54 billion years ago and is only known planet to support life.
About earth
Mass:5.972×10^24kg
Diameter at equater:12,756km
Satellites:The moon
Top 3 earth facts
1. The earth rotation is gradually slowing.
2. A yeaar isn't exactly 365 days,and the earth doesn't take 24 hours to rotate.
3. 70% of Earth's surface is water, and only one third of its fresh water is unfrozn.
Name Radius Average Temperature
Mars 3,390km -55°C
Venus 6,052km 460°C
Want to know more
Click here

PROGRAM-3

```
<!DOCTYPE html>
                    <html lang="en" dir="ltr">
                      <head>
                        <meta charset="utf-8">
                        <title>Cascading Style
                    Sheets</title>
                        <style media="screen"
                    type="text/css">
                          body
                          {
                            background-color:
                    rgb(0,0,122,0.3);
                            //background-image:
                    url(img1.png);
                          //  background-repeat: no-repeat;
                          //  background-size: contain;
                          }
                          p
                          {
                            padding-top:10pt;
                            paddind-bottom:10pt;
                            text-indent: 1em;
                          }
                          em
                          {
                            font-weight : normal;
                            color : #6F0F0F;
                          }
                          h1
                          {
                            font-family : tahoma,san-
                    serif,helvetica;
                            border-bottom:2px dotted blue;
                          }
                          p
                          {
                              font-size : 12pt;
                              font-family : san-serif,arial;
                          }
                          .special
```

```
        {
          color : purple;
        }
        a
        {
          text-decoration:none;
        }
        a:hover
        {
          text-decoration: underline;
          font-weight:bold;
          color:green;
        }
        a:visited
        {
          color:hotpink;
        }
        a:active
        {
          background-color:rgba(126, 0, 0,
0.4);
        }
        li
        {
          margin-left: 40px;
        }
        aside
        {
          font-size: .8em;
          float:right;
        }
        table
        {
          border-collapse: collapse;
          border-style:outset;
        }
      </style>
    </head>
    <body>
      <h1
class="special"><center>Cascading Style
Sheets(CSS3)</center></h1>
```

```
    <a href="#W3C">Go to W3C</a>
    <h3>WHAT IS CSS3?</h3>
    <p>Formatting and presentation of
any HTML document is done by using
cascading style sheets(CSS3).</p>
    <p style="font-size: 18pt;">The
th\ree way of using CSS3 are : </p>
    <ul>
      <li>INLINE STYLING</li>
      <li>EMBEDDED STYLE SHEETS</li>
      <li>LINKING EXTERNAL STYLE
SHEETS</li>
    </ul>
    <p>This page is to demonstrate the
use of CSS3 in our HTML document. The
CSS is used to style your html doc. file
as it can be used in three ways by
embedding it in your elememt tag the
second way is to use the style element
tag in the head of your HTML file and
then calling the following tag for
styling the last method is to create a
seperate file of css and then linking it
to yur html doc. file using link tag and
href attribute.  </p>
    <p>The process of linking external
style sheets to your HTML document is
also known as skinning.</p>
    <h3>Benefits of using CSS3</h3>
    <ol>
      <li>Improved control over
formatting</li>
      <li>Improves site
maintainability</li>
      <li>Improves page download
speed</li>
      <li>Improves output
flexibility</li>
    </ol>
    <h3 >CSS3 Properties</h3>
    <table border="1px" width="50%">
    <thead>
```

```
    <td>Property Type</td>
    <td>Property</td>
    </thead>
    <tr>
    <td rowspan="5">FONTS</td>
    <td>font-family</td>
    </tr>
    <tr>
    <td>font-size</td>
    </tr>
    <tr>
    <td>font-style</td>
    </tr>
    <tr>
    <td>font-weight</td>
    </tr>
    <tr>
    <td>font-face</td>
    </tr>
    <tr>
    <td rowspan="5">TEXT</td>
    <td>letter-spacing</td>
    </tr>
    <tr>
    <td>line-height</td>
    </tr>
    <tr>
    <td>text-align</td>
    </tr>
    <tr>
    <td>text-decoration</td>
    </tr>
    <tr>
    <td>text-indent</td>
    </tr>
    <tr>
    <td rowspan="5">COLOR AND
BACKGROUND</td>
    <td>background-color</td>
    </tr>
    <tr>
    <td>background-image</td>
```

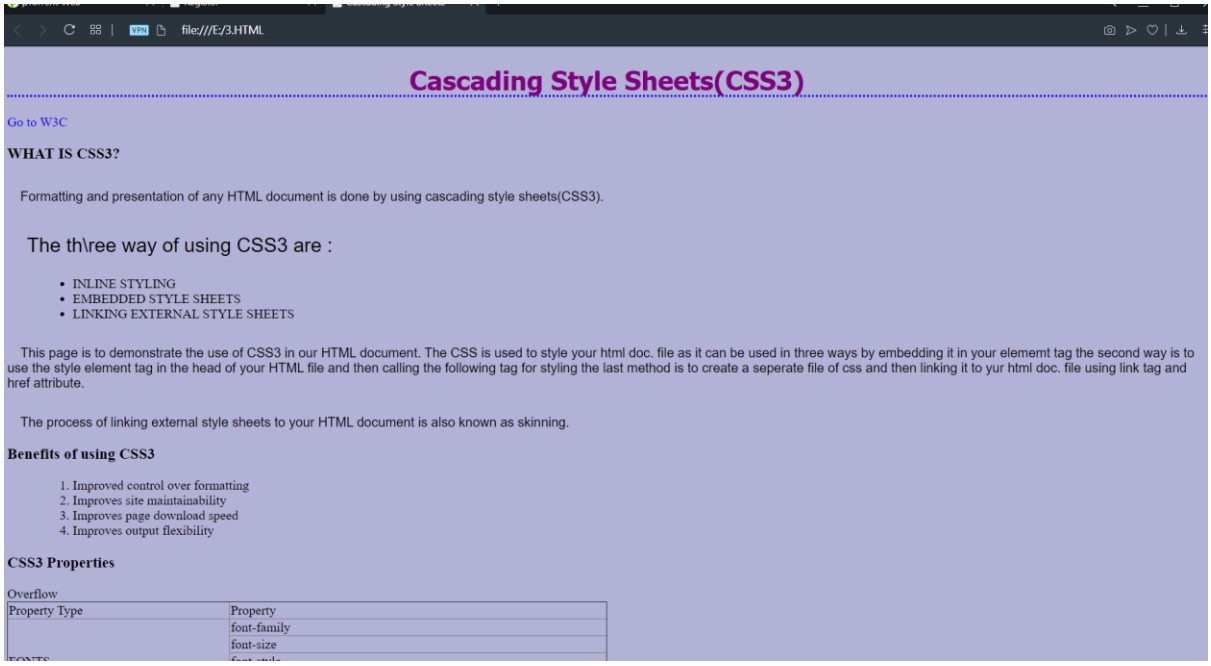
```
</tr>
<tr>
<td>background-position</td>
</tr>
<tr>
<td>background-repeat</td>
</tr>
<tr>
<td>color</td>
</tr>
<tr>
<td rowspan="6">BORDERS</td>
<td>border-color</td>
</tr>
<tr>
<td>border-width</td>
</tr>
<tr>
<td>border-style</td>
</tr>
<tr>
<td>border-top</td>
</tr>
<tr>
<td>border-top-color</td>
</tr>
<tr>
<td>border-top-width</td>
</tr>
<tr>
<td rowspan="4">SPACING</td>
<td>padding</td>
</tr>
<tr>
<td>padding-top,padding-
bottom,padding-right,padding-left</td>
</tr>
<tr>
<td>margin</td>
</tr>
<tr>
```

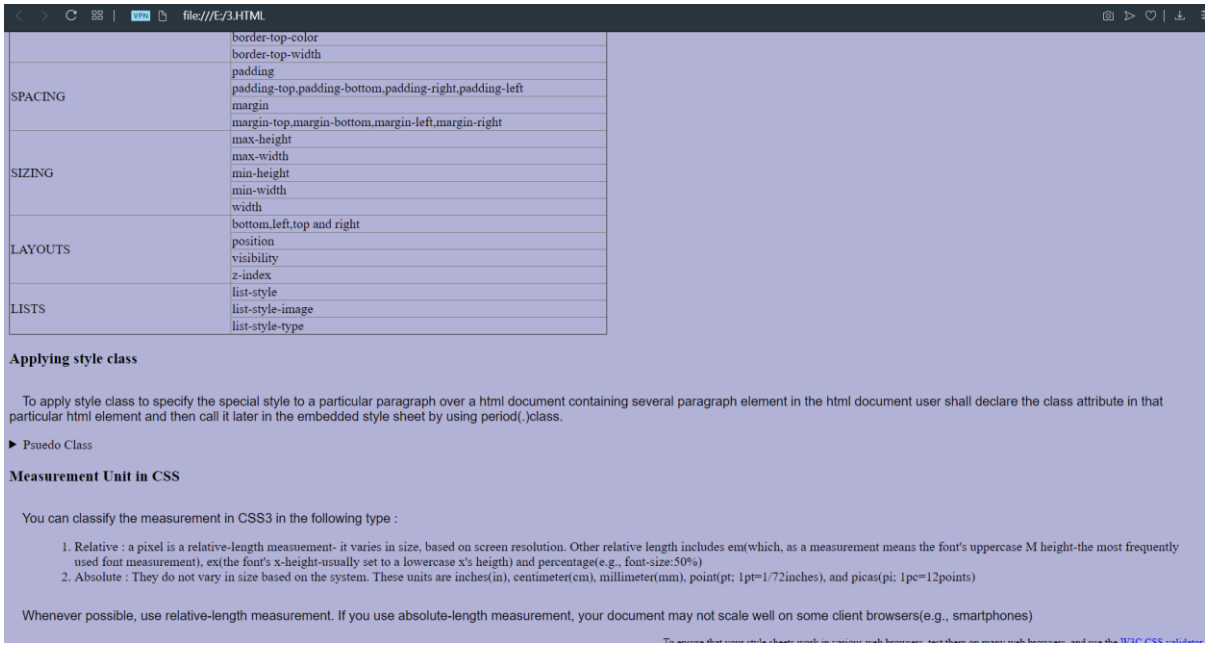
```
    <td>margin-top,margin-bottom,margin-
left,margin-right</td>
    </tr>
    <tr>
    <td rowspan="5">SIZING</td>
    <td>max-height</td>
    </tr>
    <tr>
    <td>max-width</td>
    </tr>
    <tr>
    <td>min-height</td>
    </tr>
    <tr>
    <td>min-width</td>
    </tr>
    <tr>
    <td>width</td>
    </tr>
    <tr>
    <td rowspan="5">LAYOUTS</td>
    <td>bottom,left,top and right</td>
    </tr>
    <tr>Overflow</tr>
    <tr>
    <td>position</td>
    </tr>
    <tr>
    <td>visibility</td>
    </tr>
    <tr>
    <td>z-index</td>
    </tr>
    <tr>
    <td rowspan="3">LISTS</td>
    <td>list-style</td>
    </tr>
    <tr>
    <td>list-style-image</td>
    </tr>
    <tr>
    <td>list-style-type</td>
```

```
    </tr>
    </table>
    <h3>Applying style class</h3>
    <p>To apply style class to specify
the special style to a particular
paragraph over a html document
containing several paragraph element in
the html document user shall declare the
class attribute in that particular html
element and then call it later in the
embedded style sheet by using
period(.)class. </p>
<details><summary>Psuedo Class</summary>
<p>Psuedo class gives you access to
information that's not declared in the
document, such as whether the mouse
hovering over an element or whether the
user previously clicked(visited) a
particular hyperlink</p>
</details>
<h3>Measurement Unit in CSS</h3>
<p>You can classify the measurement in
CSS3 in the following type :</p>
<ol>
  <li>Relative : A pixel is a relative-
length measuement- it varies in size,
based on screen resolution. Other
relative length includes em(which, as a
measurement means the font's uppercase M
height-the most frequently used font
measurement), ex(the font's x-height-
usually set to a lowercase x's heigth)
and percentage(e.g., font-size:50%)</li>
  <li>Absolute : They do not vary in
size based on the system. These units
are inches(in), centimeter(cm),
millimeter(mm), point(pt;
1pt=1/72inches), and picas(pi;
1pc=12points)</li>
</ol>
<p>Whenever possible, use relative-
length measurement. If you use absolute-
```

```
length measurement, your document may
not scale well on some client
browsers(e.g., smartphones) </p>
    <aside id="W3C">
      To ensure that your style sheets
work in various web browsers, test them
on many web browsers, and use the <a
href="http://www.google.com"
target="_blank">W3C CSS validator.</a>
    </aside>
  </body>
</html>
```

OUTPUT:





	border-top-color
	border-top-width
SPACING	padding
	padding-top,padding-bottom,padding-right,padding-left
	margin
	margin-top,margin-bottom,margin-left,margin-right
SIZING	max-height
	max-width
	min-height
	min-width
	width
LAYOUTS	bottom,left,top and right
	position
	visibility
	z-index
LISTS	list-style
	list-style-image
	list-style-type

Applying style class

To apply style class to specify the special style to a particular paragraph over a html document containing several paragraph element in the html document user shall declare the class attribute in that particular html element and then call it later in the embedded style sheet by using period(.)class.

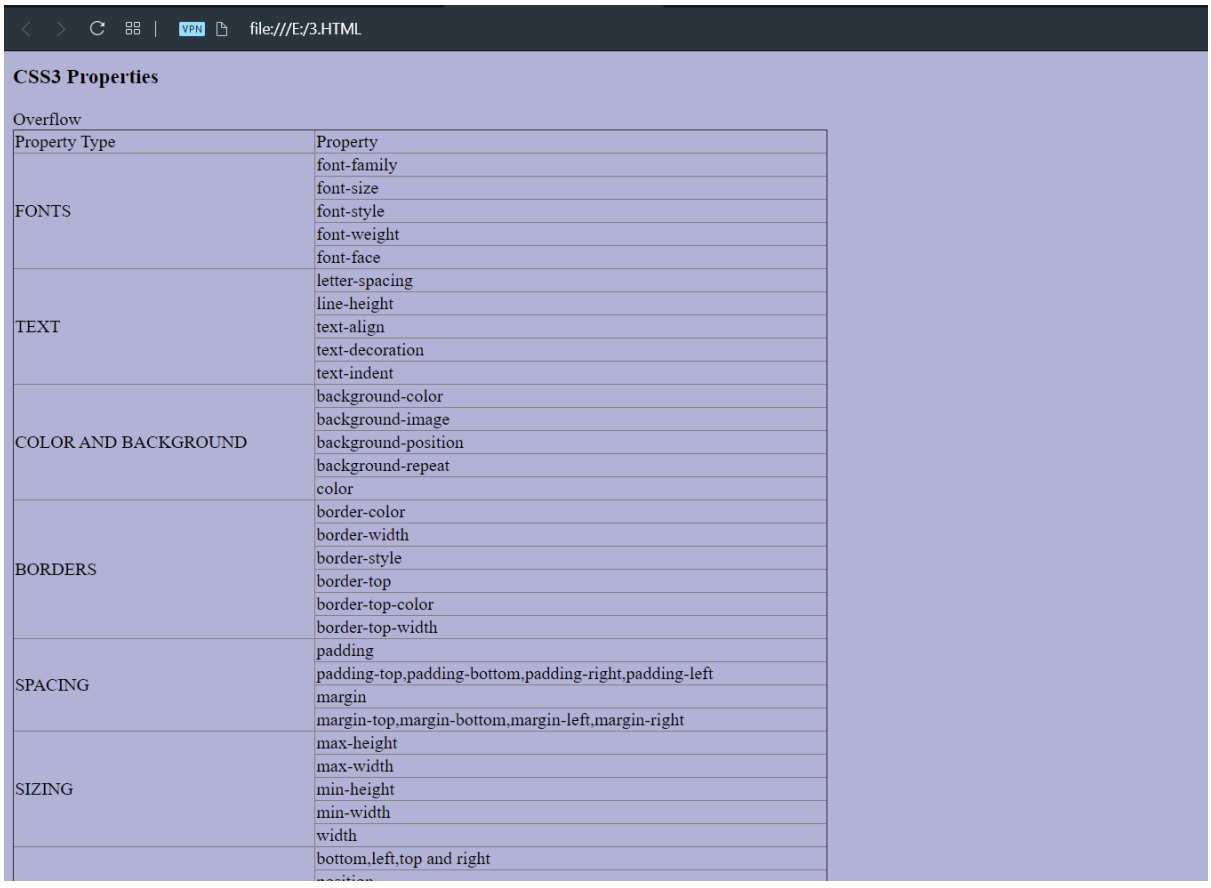
▶ Psuedo Class

Measurement Unit in CSS

You can classify the measurement in CSS3 in the following type :

1. Relative : a pixel is a relative-length measuement- it varies in size, based on screen resolution. Other relative length includes em(which, as a measurement means the font's uppercase M height-the most frequently used font measurement), ex(the font's x-height-usually set to a lowercase x's heigth) and percentage(e.g., font-size:50%)
2. Absolute : They do not vary in size based on the system. These units are inches(in), centimeter(cm), millimeter(mm), point(pt; 1pt=1/72inches), and picas(pi; 1pc=12points)

Whenever possible, use relative-length measurement. If you use absolute-length measurement, your document may not scale well on some client browsers(e.g., smartphones)



file:///E:/3.HTML

CSS3 Properties

Overflow

Property Type	Property
FONTS	font-family
	font-size
	font-style
	font-weight
	font-face
TEXT	letter-spacing
	line-height
	text-align
	text-decoration
	text-indent
COLOR AND BACKGROUND	background-color
	background-image
	background-position
	background-repeat
	color
BORDERS	border-color
	border-width
	border-style
	border-top
	border-top-color
	border-top-width
SPACING	padding
	padding-top,padding-bottom,padding-right,padding-left
	margin
	margin-top,margin-bottom,margin-left,margin-right
SIZING	max-height
	max-width
	min-height
	min-width
	width
	bottom,left,top and right

PROGRAM-4

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.

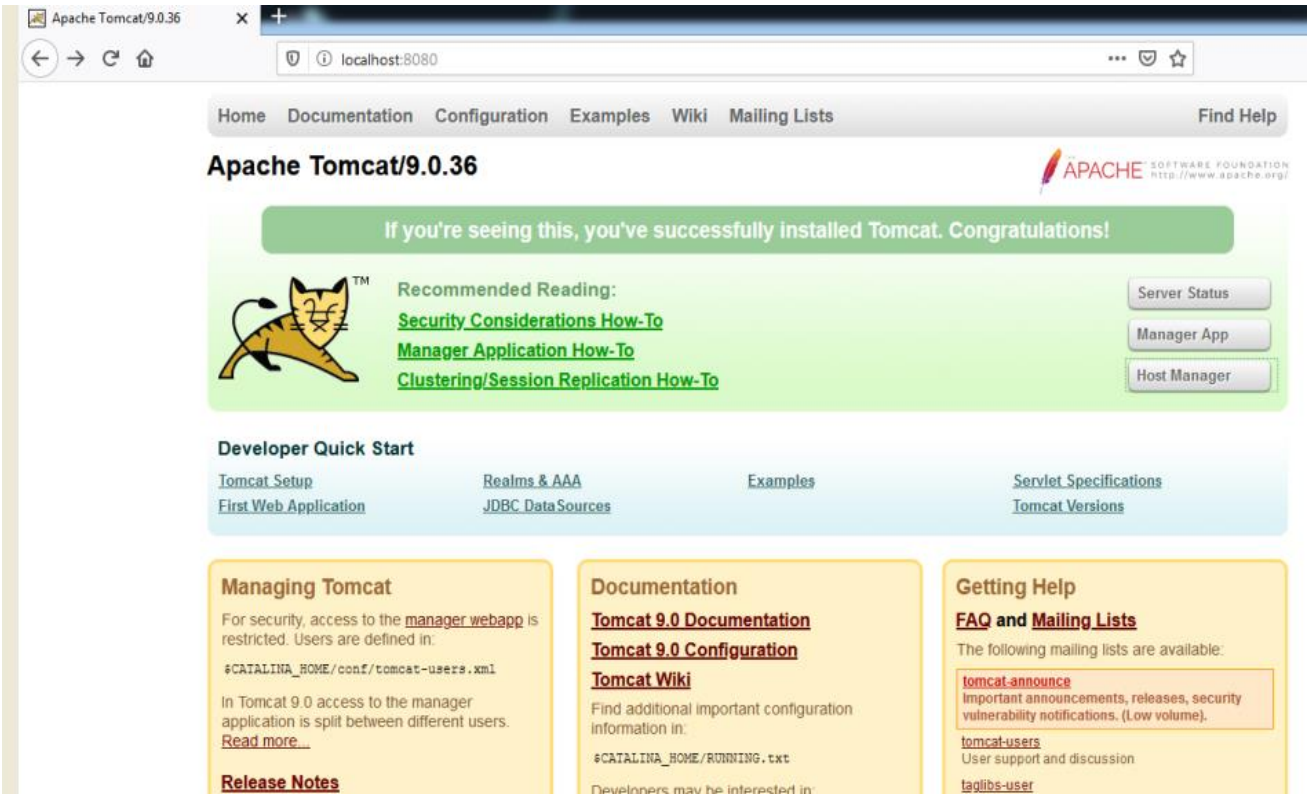
Configure Tomcat Server
The configuration files of the Apache Tomcat Server are located in the "conf" sub-directory of our
Tomcat installed directory, for example "E:\myserver\tomcat7.0.40\conf". There are 4 configuration
XML files:
1. context.xml file
2. tomcat-users.xml file

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-


Apache Tomcat/9.0.36
localhost:8080
Home
Documentation
Configuration
Examples
Wiki
Mailing Lists
Find Help
Apache Tomcat/9.0.36
APACHE SOFTWARE FOUNDATION http://www.apache.org/
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
First Web Application
Realms & AAA
JDBC DataSources
Examples
Servlet Specifications
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 9.0 access to the manager application is split between different users.
Read more...
Release Notes
Documentation
Tomcat 9.0 Documentation
Tomcat 9.0 Configuration
Tomcat Wiki
Find additional important configuration information in:
$CATALINA_HOME/RUNNING.txt
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

PROGRAM-5

```
<?xml version="1.0" encoding="UTF-8"?>
```

Advantages of web.xml files

- The first benefit of the xml is we can write it in our won markup language. There is a no restricted to limited sets of tags. By defining our own tag we can create a markup language in terms of specific problem.
- Searching the data is easy and efficient.

```
<?xml version="1.0" encoding="UTF-8"?>
<note>
  <to>Paras</to><br>
  <from>Tushar</from><br>
  <heading>Reminder</heading><br>
  <body>Have a great day!</body>
</note>
```

OUTPUT:

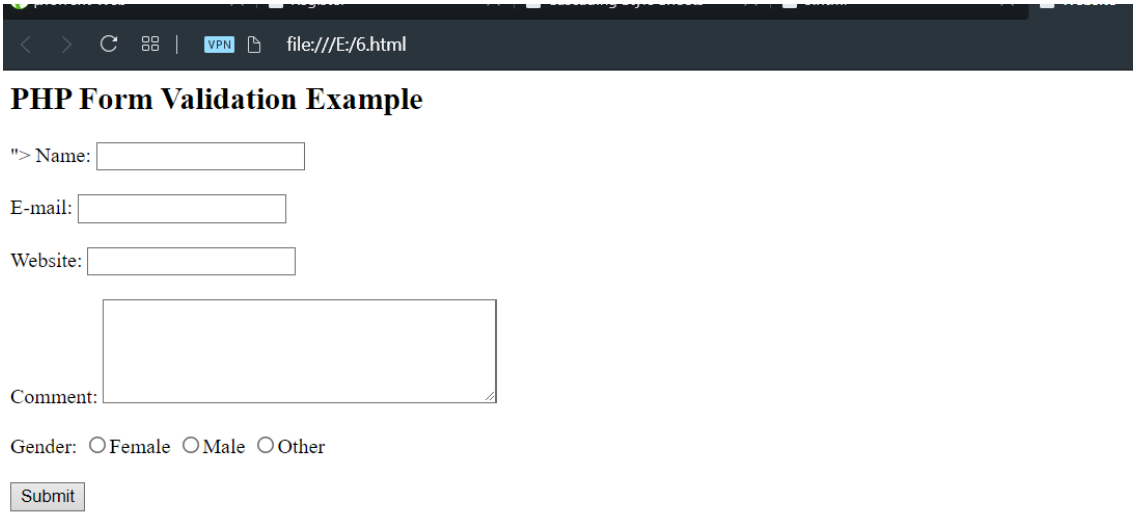
Paras
Tushar
Reminder
Have a great day!

PROGRAM-6

```
<html>
        <head>
          <meta charset="UTF-8">
          <meta name="viewport" content="width=device-width,
        initial-scale=1.0">
          <title>Website</title>
        </head>
        <body>
        <?php


        $name = $email = $gender = $comment = $website = "";


        if ($_SERVER["REQUEST_METHOD"] == "POST") {
          $name = test_input($_POST["name"]);
          $email = test_input($_POST["email"]);
          $website = test_input($_POST["website"]);
          $comment = test_input($_POST["comment"]);
          $gender = test_input($_POST["gender"]);
        }


        function test_input($data) {
          $data = trim($data);
          $data = stripslashes($data);
          $data = htmlspecialchars($data);
          return $data;
        }
        ?>


        <h2>PHP Form Validation Example</h2>
        <form method="post" action="<?php echo
        htmlspecialchars($_SERVER["PHP_SELF"]);?>">
          Name: <input type="text" name="name">
          <br><br>
          E-mail: <input type="text" name="email">
          <br><br>
          Website: <input type="text" name="website">
```

```
  <br><br>
  Comment: <textarea name="comment" rows="5"
cols="40"></textarea>
  <br><br>
  Gender:
  <input type="radio" name="gender"
value="female">Female
  <input type="radio" name="gender" value="male">Male
  <input type="radio" name="gender"
value="other">Other
  <br><br>
  <input type="submit" name="submit" value="Submit">
</form>


<?php
echo "<h2>Check Your Entry:</h2>";
echo $name;
echo "<br>";
echo $email;
echo "<br>";
echo $website;
echo "<br>";
echo $comment;
echo "<br>";
echo $gender;
?>
      </body>
      </html>
```

OUTPUT:


VPN
file:///E:/6.html
PHP Form Validation Example
"> Name:
E-mail:
Website:
Comment:
Gender: Female Male Other
Submit

PROGRAM-7

```
<html>
<head>
<title>Reaction Timer</title>
<style type="text/css">
body {
font-family: sans-serif;
}
#shape {
width: 200px;
height: 200px;
background-color: red;
display: none;
position: relative;
}
.bold {
font-weight: bold;
}
</style>
</head>
<body>
<h1>Test Your Reactions!</h1>
<p>Click on the boxes and circles as quickly as you can!</p>
<p class="bold">Your time: <span
id="timeTaken"></span></p>
```

```
<div id="shape"></div>
<script type="text/javascript">
var start = new Date().getTime();
function getRandomColor() {
var letters = '0123456789ABCDEF'.split('');

var color = '#';

for (var i = 0; i < 6; i++ ) {

color += letters[Math.floor(Math.random() * 16)];

}

return color;

}

function makeShapeAppear() {

var top = Math.random() * 400;

var left = Math.random() * 400;

var width = (Math.random() * 200) + 100;

if (Math.random() > 0.5) {
```

```
document.getElementById("shape").style.borderRadius = "50%";

} else {

document.getElementById("shape").style.borderRadius = "0";

}

document.getElementById("shape").style.backgroundColor =
getRandomColor();

document.getElementById("shape").style.width = width + "px";
document.getElementById("shape").style.height = width + "px";

document.getElementById("shape").style.top = top + "px";
document.getElementById("shape").style.left = left + "px";

document.getElementById("shape").style.display = "block";

start = new Date().getTime();

}

function appearAfterDelay() {

setTimeout(makeShapeAppear, Math.random() * 2000);
```

```
}

appearAfterDelay();

document.getElementById("shape").onclick = function() {

document.getElementById("shape").style.display = "none";

var end = new Date().getTime();

var timeTaken = (end - start) / 1000;

document.getElementById("timeTaken").innerHTML = timeTaken +
"s";
appearAfterDelay();
}
</script>
</body>
</html>
```

OUTPUT:

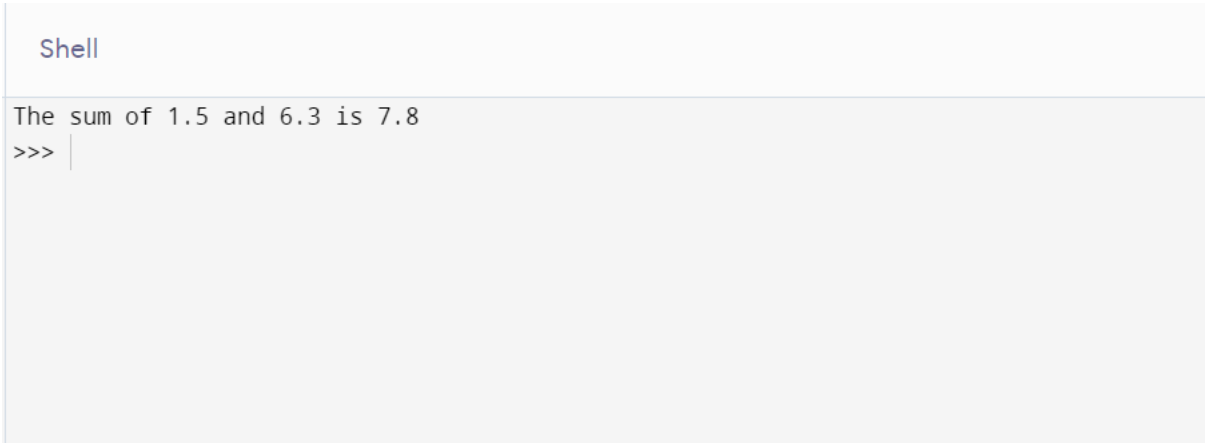

file:///E:/7.html
Test Your Reactions!
Click on the boxes and circles as quickly as you can!
Your time: 1.146s

PROGRAM-8

(i) PYTHON PROGRAM TO ADD TO NUMBERS

```
    Num1= 1.5
    Num2= 6.3
    Sum= num1 +num2
Print(‘ sum of {0} and {1} is
{2}’.format(num1,num2,sum))
```

OUTPUT:



(ii) PYTHON PROGRAM TO CHECK NUMBER IS ODD OR EVEN

```
Num = int(input(“enter a number:”))
If( num%2==0:
    Print (“{0} is even”.format(num))
Else:
     Print(“{0} is odd”.format(num))
```

OUTPUT:

(iii) PYTHON PROGRAM TO CHECK WHETHER A STRING IS PALINDROME OR NOT

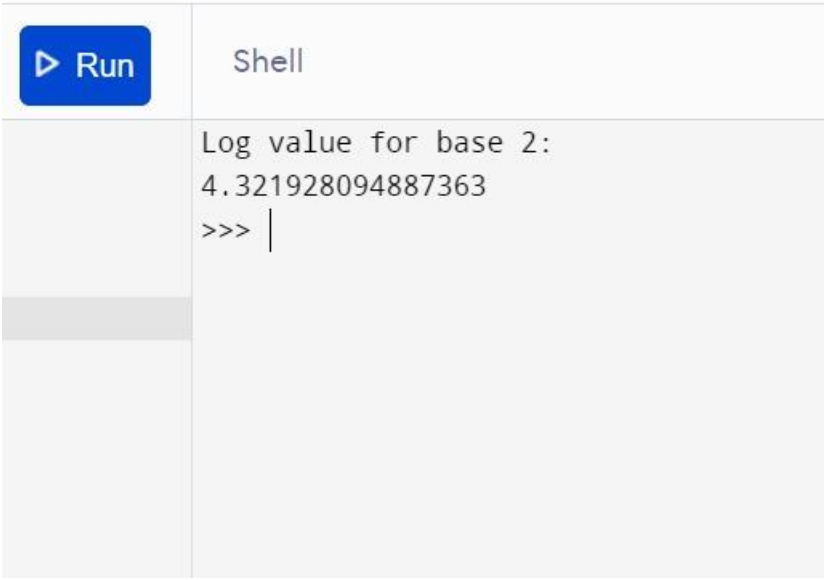
```
 My_str = ‘mom’
My_str = my_str.casefold()
  Rev_str = reversed(my_str)
  If list (my_str) == list(rev_str):
        Print(“the string is palindrome”
  Else:
        Print (“the string is not a palindrome”)
```

OUTPUT:

PROGRAM -9

(i) USE PYTHON TO CREATE PROGRAMS FOR SCIENTIFIC COMPUTATIONS:

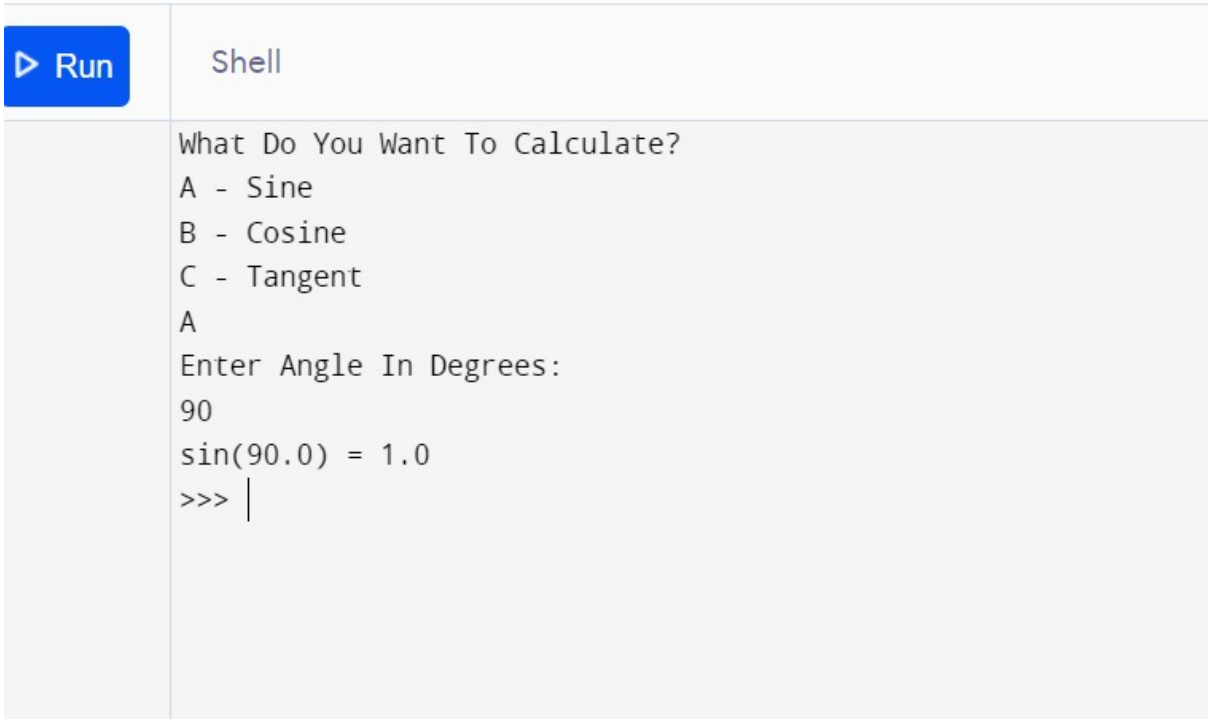
```
import math

print ("Log value for base 2: ")
print (math.log2(20))
```



(ii)USING PYTHON TO CALCULATE SCIENTIFIC COMPUTATIONS:

```
import math

print("What Do You Want To Calculate?")
print("A - Sine")
print("B - Cosine")
print("C - Tangent")
t = input()
print("Enter Angle In Degrees: ")
ang = float(input())
pi = math.acos(-1)
if t == "A" or t == "a":
    print("sin(" + str(ang) + ") = " +
str(math.sin(ang*pi/180)))

elif t == "B" or t == "b":
    print("cos(" + str(ang) + ") = " +
str(math.cos(ang*pi/180)))

elif t == "C" or t == "c":
   print("tan(" + str(ang) + ") = " +
str(math.tan(ang*pi/180)))
```

OUTPUT:


Run
Shell
What Do You Want To Calculate?
A - Sine
B - Cosine
C - Tangent
A
Enter Angle In Degrees:
90
sin(90.0) = 1.0
>>>