1	Create Simple website with 5 pages (Home, About, Gallery, Course, Contact). Gallery and contact page with contact us form is must.
	Website creation for different applications (E-Books, Exam registration processing, Student information system, product advertisement details etc.,)
2	Create a web page with the following using HTML i) To embed an image map in a web page ii) To fix the hot spots iii) Show all the related information when the hot spots are clicked.
3	Create a web page with all types of Cascading style sheets.
4	Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.
5	Client Side Scripts for Validating Web Form Controls using DHTML
6	Find the Factorial of a Number(PHP/JavaScript)
7	Display the Multiplication Table(PHP/JavaScript)
8	to Check Armstrong Number(PHP/JavaScript)
9	to Find the Sum of Natural Numbers(PHP/JavaScript)
10	to Check Whether a String is Palindrome or Not(PHP/JavaScript)
11	to Reverse a String(PHP/JavaScript)

EX.NO.01 CREATING A SIMPLE WEBSITE WITH 5 PAGES USING HTML

AIM:

To create a simple website using HTML which includes the following pages:

- i) Home
- ii) About
- iii) Gallery
- iv) Course
- v) Contact

ALGORITHM:

- 1) Open notepad or any text editor and type your HTML program.
- 2) Here, 6 HTML files are needed and use appropriate tags as required to create the website.
- 3) Set the font face, size and colour in the font tag.
- 4) Set the background colour in the body tag.
- 5) Get the image and link it to the package.
- 6) Use horizontal row, table and list tags wherever needed.
- 7) Save the files with .html extension.
- 8) Run the program in the Web Browser.

RESULT:

Thus a simple website with home, about, gallery, course and contact pages using HTML was created and executed successfully.

PROGRAM:

</head>

```
Main.html
<html>
<head>
 <meta charset="utf-8">
 <meta name="viewport" content="width=device-width, initial-scale=1">
 <title>Main page</title>
 <h1><hr><center>X Y Z COLLEGE OF ENGINEERING</center><hr></h1>
</head>
<body bgcolor = "white">
 <font face="Arial Black" size="3">
   <a href="home.html" target="des_page">Home</a>
       <a href="about.html" target="des_page">About</a>
       <a href="gallery.html" target="des_page">Gallery</a>
       <a href="course.html" target="des_page">Course</a>
       <a href="contact.html" target="des_page">Contact</a>
     </font>
</body>
</html>
Home.html
<html>
<head>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <title>Home</title>
      <font face = "Times New Roman" color = "Green" align = "center">
      <hr><h1><b>X Y Z COLLEGE OF ENGINEERING<hr></b></h1>
```

```
<body align = "center" bgcolor = "silver">
       <img src = "admin.jpg">
       <b>"ADMISSION WILL BE GRANTED ON MERIT BASIS"</b>
       <font color = "navy" face = "Times New Roman" size = "5">
       <b><u>UG Programmmes:-</u></b><br></font>
       <font color = "black" face = "Times New Roman" size = "4">
              <br>
                    S.E. Mechanical Engineering
                    B.E. Electrical and Electronics Engineering
                    B.E. Electronics and Communication Engineering
                    B.E. Computer Science and Engineering
                    B.Tech. Information Technology
                    B.Tech Artificial Intelligence and Data Science
                    B.E. Automobile Engineering
              </font>
              <font color = "navy" face = "Times New Roman" size = "5">
              <b><u>PG Programmmes:-</u></b><br></font>
              <font color = "black" face = "Times New Roman" size = "4">
              <br>
                    Master of Business Administration
                    Master of Computer Applications
                    M.E. Communication Systems
                    M.E. Software Engineering
                    M.E. Embedded Systems
                    M.Sc. Cyber Forensics & Information Security
                    M.Sc. Geoinformatics
              </font>
<br><br>>
<marquee>Application for B.E/B.Tech Admissions 2023-24 for HSC Students (Starts on 8.5.2023)
</body>
</html>
```

```
About.html
```

```
<html>
<head>
         <meta charset="utf-8">
         <meta name="viewport" content="width=device-width, initial-scale=1">
         <title>About</title>
         <font face = "Times New Roman" color = "red">
         <h2><hr>Welcome to XYZ College of Engineering</h2></hr>
</font>
</head>
<body align = "justify" bgcolor = "silver">
         <fort face = "Times New Roman" size = "4" color = "black">
         <hr><b><u>About</u></b><br>
         XYZ aims at creating quality professionals to meet the emerging industrial and social
         needs through innovative teaching, applied research and industrial interaction. The
         institution has fourteen academic departments (offering seven UG and PG programmes),
         five nodal research centers, Incubation center and more than thirty laboratories aiding
         hands-on learning of products and system building. Each course is designed to have balance
         depth of conceptual and Technical knowledge along with practical understanding.<br/>
<br/>br><br/>
<br/>
depth of conceptual and Technical knowledge along with practical understanding.<br/>
  <u><b>Vision</b></u><br>
  To provide affordable quality education, while equipping students with knowledge and skills
  in their chosen stream, inculcate values, identify hidden talents, provide opportunities for
  students to realize their full potential and thus shape them into future leaders,
  entrepreneurs and above all good human beings.<br><br>>
  <u><b>Mission</b></u><br>
  To strive for quality education in keeping with the motto of the college, "Excellence in Education"
  and prepare young minds for imbibing knowledge, skills and sensitivity.
</body>
</html>
```

```
Gallery.html
<html>
<head>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <title>Gallery</title>
</head>
<body align = "center" bgcolor = "silver">
        <fort face = "Times New Roman" size = "5" color = "black">
        <hr><u>Classroom</u>
        <img src = "class.jpg" width = "700" height = "500"/><br><hr>
        <hr><u>Computer Science Laboratory</u>
        <img src = "Computer-Lab.jpg"/><br><hr>
        <hr><u>Electronics Laboratory</u>
        <img src = "electronics_lab.jpg"/><br><hr>
        <hr><u>Table-Tennis Court</u>
        <img src = "sports3.jpg"/><br><hr>
</font>
</body>
</html>
Course.html
<html>
<title>Course</title>
<head>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <hr><font color = "blue" face = "Times New Roman" size = "4">
        <h1>Offered Courses</h1>
</hr></font>
</head>
<body bgcolor = "silver">
<fort color = "navy" face = "Times New Roman" size = "5">
```

<u>UG and PG Programmmes:-</u>


```
<fort color = "black" face = "Times New Roman" size = "4">
             <br>
                   B.E. Mechanical Engineering
                   B.E. Electrical and Electronics Engineering
                   B.E. Electronics and Communication Engineering
                   S.E. Computer Science and Engineering
                    B.Tech. Information Technology
                   B.Tech Artificial Intelligence and Data Science
                   S.E. Automobile Engineering
             <br>
                   Master of Business Administration
                   Master of Computer Applications
                   M.E. Communication Systems
                   M.E. Software Engineering
                   M.E. Embedded Systems
                   M.Sc. Cyber Forensics & Information Security
                   M.Sc. Geoinformatics
             </font>
</body>
<hr></hr>
</html>
```

Contact.html

```
<html>
<head>
       <meta charset="utf-8">
       <meta name="viewport" content="width=device-width, initial-scale=1">
       <hr><h1><b><u>Contact:</u></b></h1>
       <title>Contact</title>
</head>
<body bgcolor = "silver">
       <h3><b>College Address:</b></h3>
       <u>Postal Address</u></u>
                <br/>
<br/>br>X Y Z COLLEGE OF ENGINEERING
                <br/>br>XXX city, YYY District,
                <br/>br>Tamilnadu, INDIA.
       <u>Phone Number</u></u>
                <br/>br>+91-452-2485657
               <br/>br>+91-452-2487565
       <u>Email ID</u></u>
                <br/>br>query@xyzce.edu
       <u>Website URL</u></u>
                <br/>br>http://www.xyzce.edu
       <hr>
</body>
</html>
```

OUTPUT:

Main page:

X Y Z COLLEGE OF ENGINEERING

		12	.,	×	
Home	About	Gallery	Course	Contact	

Home page:

X Y Z COLLEGE OF ENGINEERING

ADMISSIONS OPEN 2023-2024

"ADMISSION WILL BE GRANTED ON MERIT BASIS"

UG Programmmes:-

- B.E. Mechanical Engineering
 B.E. Electrical and Electrocics Engineering
 B.E. Electrocics and Communication Engineering
 B.E. Computer Science and Engineering
 B. Tech. Information Technology
 Brech Artificial Intelligence and Data Science
 B.E. Automobile Engineering

PG Programmmes:-

- Master of Business Administration
 Master of Computer Applications
 M.E. Communication Systems
 E. Software Engineering
 M.E. Embedded Systems
 M.Sc. Cyber Forensics & Information Security
 M.Sc. Geoinformatics

Application for B.E.B. Tech Admissions 2023-24 for HSC Students (Starts on 8.5.2023)

About page:

About XYZ clims at creating quality professionals to meet the emerging industrial and social needs through innovative teaching, applied research and industrial interaction. The institution has fourteen academic departments (offering seven UG and PG programmes), five nodal research centers, lincularion center and more than thairty laboratories aiding hands-on learning of products and system building. Each course is designed to have balance depth of conceptual and Technical knowledge along with practical understanding. **Yision** To provide affordable quality education, while equipping students with knowledge and skills in their chosen stream, inculcate values, identify hidden talents, provide opportunities for students to realize their full potential and thus shape them into future leaders, entrepreneurs and above all good human beings. **Mixion** To strive for quality education in keeping with the motto of the college, "Excellence in Education" and prepare young minds for imbibing knowledge, skills and sensitivity.

Gallery page:



Course page:

UG and PG Programmmes: B.E. Mechanical Engineering B.E. Electrical and Electronics Engineering B.E. Electronics and Communication Engineering B.E. Computer Science and Engineering B.E. Computer Science and Engineering B.E. Automobile Engineering B.E. Automobile Engineering Master of Business Administration Massler of Computer Applications M.E. Communication Systems M.E. Communication Systems M.E. Communication Systems M.E. Endeware Engineering M.E. Endeware Engineering M.E. Screwer Engineering M.S.C. Cyler Toernics & Information Security M.S.C. Geoinformanics

Contact page:

Contact:			
Contact.			
College Address:			
Postal Address XYZ COLLEGE OF ENGINEERING XXX city, YYY District, Tuminashu, INDIA.			
Phone Number +91-432-2485637 +91-452-3487565			
Email ID query@xyzee.edu			
Website URL http://www.xyzce.edu			

EX.NO.02 CREATING A WEBPAGE OF IMAGE MAPPING USING HTML

AIM:

To create a web page with the following using HTML:

- i) To embed an image map in a web page.
- ii) To fix the hot spots.
- iii) Show all the related information when the hot spots are clicked.

ALGORITHM:

- 1) Open notepad or any text editor and type your HTML program.
- 2) Here, 4 HTML files are needed and use appropriate tags as required to create the website.
- 3) Create a HTML file with map tag.
- 4) Set the source attribute of the img tag to the location of the image and also set the use map attribute.
- 5) Specify an area with name, shape and href set to the appropriate values.
- 6) Get the India map image and link it to the package.
- 7) Fix the hotspots in that image.
- 8) Map the reference of the hotspots in the image.
- 9) Save the files with .html extension.
- 10) Run the program in the Web Browser.

RESULT:

Thus the creation of a web page which includes a map and display the related information when a hot spot is clicked in the map was executed successfully.

PROGRAM:

```
Indiamap.html
<!DOCTYPE html>
<html>
<body>
<h1>INDIA MAP</h1>
Click on the Hotspots to go to a new page and read more about the Places:
<img src="india.jpg" alt="Workplace" usemap="#workmap" width="209" height="242">
<map name="workmap">
<area shape="rect" coords="83,41,57,63" alt="delhi" href="delhi.html">
 <area shape="rect" coords="149,129,124,83" alt="calcutta" href="calcutta.html">
 <area shape="rect" coords="89,184,56,226" alt="tamilnadu" href="tamilnadu.html">
</map>
India is the Seventh Largest country in the world by geographical area, the second most populous
country with over 1.2 billion people, and the most populous democracy in the world. India is a federal
constitutional Republic with a parliamentry democracy consisting of 28 states and 7 Union
Terrirories.
<h2>Features</h2>
<b>Population</b> - 1,028,610,328 (2001 census).
<b>Capital </b> - New Delhi
<b>Largest City </b> - Mumbai
<b>Currency </b> - Indian Rupee.
<b>Time Format</b> - IST (UTC + 5:30)
<b>National Sport </b> - Hockey
<b>Current PM </b> - Manmohan Singh
<b>Current President </b> - Prathiba Patil
<h2><b>To view the details of states please click on the specified area in the map!!</b></h2>
<h3><b>(Here the fixed hotspots are Tamilnadu, Delhi and Kolkata)</b></h3>
</body>
</html>
```

Tamilnadu.html

Velankanni.

```
<html>
<body bgcolor="skyblue">
<font face="Times New Roman" size="4" color="black">
<h1><b><center>Tamil Nadu</center></b></h1>
<h3>Tamilnadu is one of the 28 states of India. Its capital and largest city is Chennai. Tamil Nadu lies in the
southernmost part of the Indian Peninsula and is bordered by the States of Puducherry, Kerala,
Karnataka and Andhra Pradesh. It is bound by the Eastern Ghats in the north, the Nilgiri, the
Anamalai Hills, and Palakkad on the west, by the Bay of Bengal in the east, the Gulf of Mannar, the
Palk Strait in the south east, and by the Indian Ocean in the south. More IT companies are camped at
Chennai.</h3>
<h3>
<i>Districts </i> - 32
<i>Capital City </i> - Chennai
<i>Largest City </i> - Chennai
<i>Governor </i> - Shri Konijeti Rosaiah.
<i>Chief Minister</i> - Mrs. J. Jayalalitha
<i>Popultation </i> - 66,396,000
<i>Dance </i> - Bharthanatyam
<i>Festivals</i> - Pongal, Alanganallur Jallikattu etc.,
<i>Cuisine </i> - Dosai, Adai, Idly, Vadai, Pongal, Appam(Aappam), Paniyaram, Puttu(Pittu),
Uppumavu(Uppuma), Santhakai(Noodles), Idiyappam and Uthappam.
<i>Tourist spots </i>
Mamallapuram (Shore Temple)
Srihadeeshwara Temple
Ooty
Kodaikanal.
Kanyakumari. (Thiruvalluvar statue etc.,)
Marina Beach(chennai)
Madurai Meenakshi Amman Temple.
Thanjavur.
```

```
Rameswaram.
<a href="Indiamap.html">Home</a>
</font>
</body>
</html>
Delhi.html
<html>
<body bgcolor="gray">
<font face="Arial" size="4" color="white">
        <center>DELHI</center><br>
<center><b><i>>Delhi is the capital of our INDIA<br/>or> and <br/>or> More IT companies are
Camped at Delhi</tt></i>/center>
<br>>br><br>
New Delhi is the national capital of India.
In December 1911 King George V of Britain decreed that the capital of British India would be moved from
Calcutta (which is today called Kolkata) to Delhi.
Construction began in 1912 at a site about 3 miles (5 km), south of the Delhi city centre, and the new capital
was formally dedicated in 1931.
New Delhi is best known as the location of India's national government.
New Delhi has great historical significance as it was home to powerful people, such as the Pāṇḍavas and the
Mughals.
The city has many historical monuments and tourist attractions as well as lively marketplaces and great food,
such as chaat.
New Delhi is among the world's most polluted cities.Contributing to the smog are traffic
congestion, heavy industry, and the lack of cleansing winds in the area.
Although antipollution measures undertaken since the 1980s have improved the city's air quality
considerably, pollution continues to be a deadly problem. 
<br>><br>>
<a href="Indiamap.html">Home</a>
</font>
</body>
</html>
```

Calcutta.html

```
<html>
<body bgcolor="maroon">
<font face="Times New Roman" size="4" color="pink">
        <center>KOLKATA</center><br><br>
<center><b><i>Calcutta is the wealthy city in WEST BENGAL<br> and <br/> and <br/> Famous
"Sunderbans Forests"</i></b></center>
<h1>About:</h1>
Kolkata, or Calcutta as it was formerly called, is the present capital of the eastern state of West Bengal and
one of the most densely populated cities in India.
Kolkata became a British trading post in the last part of the 17th Century.
The city that once served as the showpiece capital of the British power in India is noted for its colonial
buildings including the grand Victoria Memorial.
Other important sights include the Howrah Bridge, an engineering marvel that links the city and Howrah
Station, and the Indian Museum.
Gateway to eastern India and home to prominent intellectuals, the city is known for its easy pace and
intellectual prowess.
<br>>dr><br>
<h1>Major Attractions:</h1>
Kolkata is a city of colonial architecture, museums, art galleries, traditional food, temples, music and
theatre.
It is an amalgamation of traditional and modern.
It is famous for its theatre and films.
It is the land of Rabindranath Tagore and the sound of Rabindra Sangeet can be heard from every house.
<br><br>>
<a href="Indiamap.html">Home</a>
</font>
</body>
</html>
```

OUTPUT:

INDIA MAP

Click on the Hotspots to go to a new page and read more about the Places:



India is the Seventh Largest country in the world by geographical area, the second most populous country with over 1.2 billion people, and the most populous democracy in the world. India is a federal contributional Republic with a parliamentry democracy comisting of 28 states and 7 Union Territories.

Features

- Population 1.028.610.328 (2001 census).
 Capital New Delhi
 Largest City Mumbai
 Currency Indian Rupee.
 Time Format IST (UTC 5:30)
 National Sport Hockey
 Current PM Manmohan Singh
 Current President Prathiba Patil

To view the details of states please click on the specified area in the map!!

(Here the fixed hotspots are Tamilnadu, Delhi and Kolkata)

Tamil Nadu

Tamilnadu is one of the 28 states of India. Its capital and largest city is Chennai. Tamil Nadu lies in the southernmost part of the Indian Peninsula and is bordered by the States of Puducherry, Kerala, Karnataka and Andhra Pradesh. It is bound by the Eastern Ghats in the north, the Nilgiri, the Anamalai Hills, and Palakkad on the west, by the Bay of Bengal in the east, the Gulf of Mannar, the Palk Strait in the south east, and by the Indian Ocean in the south. More IT companies are camped at Chennai. (States of Parameters of Bengal in the casses)

1. Districts - 32

2. Capital City - Chennal

3. Largest City - Chennal

3. Largest City - Chennal

4. Governor - Shri Konijeti Rosaiah.

5. Chief Minister - Mrs. J. Jayalailiha

6. Popultation - 66,396,000

7. Danice - Bharthanatyam

8. Festivats - Pongal, Alanganallur Jallikattu etc.,

9. Cuisine - Dosal, Adal, Idiy, Vadai, Pongal, Appam(Aappam), Paniyaram, Puttu(Pittu), Uppumavu(Uppuma), Santhakai(Noodles), Idiyappam and Uthappam.

10. Tourist spots

o Mamaliapuram (Shore Temple)

Birlhadeeshwara Temple

Ooty

Kodaikanal,

Kanyakumari, (Thiruvalluvar statue etc.,)

Marina Beach(chennal)

Marina Beach(chennal)

Marina Beach(chennal)

Marina Wennakshi Amman Temple.

Thanjavur.

Velaukanil.

Rameswaram.

DELHI ith is the national capital of India. miber 1911 King George V of Britain decreed that the capital of British India would be moved from Calcutta (which is today called Kolkata) to Delhi. cition began in 1912 at a site about 3 miles (5 km), south of the Delhi city centre, and the new capital was formally dedicated in 1931. Ith is best known as the location of India's national government. Ith has great historical significance as it was home to powerful people, such as the Pândavas and the Mughals, has many historical moruments and fourist attractions as well as lively marketplaces and great food, such as chaat, ith is among the world's most polluted cities. Uting to the smog are traffic congestion, heavy industry, and the lack of cleansing winds in the area. h antipoliulion measures undertaken since the 1980s have improved the city's air quality considerably, pollution continues to be a deadly problem.

Calcutta is the wealthy city in WEST BENGAL and
It has Famous "Sunderbans Forests"

About:

- Kolkata, or Calcutta as it was formerly called, is the present capital of the eastern state of West Bengal and one of the most densely populated cities in India. Kolkata became a British trading post in the last part of the 17th Century.

 The city that once served as the showpiece capital of the British power in India is noted for its colonial buildings including the grand Victoria Memorial. Other important sights include the Howrah Bridge, an engineering marvel that links the city and Howrah Station, and the Indian Museum.

 Gateway to eastern India and home to prominent intellectuals, the city is known for its easy puce and intellectual provess.

Major Attractions:

- Kolkata is a city of colonial architecture, museums, art galleries, traditional food, temples, music and the It is an amalgamation of traditional and modern. It is famous for its theatre and films.

 It is the land of Rabindmanth Tagore and the sound of Rabindm Sangeet can be heard from every house.

EX.NO.03 CREATING A WEB PAGE WITH CSS

AIM:

To create a web page with all types of Cascading style sheets.

ALGORITHM:

- 1) Open notepad or any text editor and type your HTML and CSS programs in different files.
- 2) Here, a CSS file and 6 HTML files are required.
- 3) Use appropriate tags as required in the HTML files in order to create the website.
- 4) Include a reference to the external style sheet file inside the link> element, inside the <head> section of an HTML page.
- 5) Define internal styles within the <style> element, inside the <head> section of an HTML page.
- 6) Define inline styles within the "style" attribute of the relevant element.
- 7) Save the HTML files with .html extension.
- 8) Set the names and values for the attributes in the CSS file.
- 9) Save the CSS file with .css extension.
- 10) Run the program in the Web Browser.

RESULT:

Thus the creation of web page with all types of Cascading style sheets was executed successfully.

PROGRAM:

p.left

```
Fontstyle.html
<html>
<head>
link rel="stylesheet" href="font.css">
</head>
<body>
My text with font-arial
My text with font-calibre
My text with font-cooper
</body>
</html>
Font.css
p.center
{
color:pink;
text-align:center;
letter-spacing:3;
font-family:arial;
font-variant:small;
font-weight:bold;
}
p.right
color:orange;
text-align:right;
letter-spacing:10;
font-family:calibre;
font-variant:uppercase;
font-weight:bold;
```

```
{
color:green;
text-align:left;
letter-spacing:15;
font-family:cooper;
font-variant:uppercase;
font-weight:bold;
}
Background.html
<html>
<head>
<style type="text/css">
body
background-image:url(wt.jpg);
background-repeat:repeat;
}
</style>
</head>
<body>
<h1 align="center">WebTechnology</h1>
</body>
</html>
Background-image.html
<html>
<head>
<style type="text/css">
body
1
background-image:url(wt.jpg);
background-color:pink;
background-repeat:no-repeat;
background-position:center;
background-attachment:fixed;
```

```
}
h1
{
background-image:url(wt1.jpg);
background-position:right;
color:red;
background-repeat:no-repeat;
}
</style>
</head>
<body>
<h1 align="center">WEB TECHNOLOGY<br></h1>
</body>
</html>
Link.html
<html>
<head>
<style type="text/css">
a:link
{
color:red;
text-decoration:underline;
font-family:arial;
font-size:spot;
}
a:visited
{
color:yellow;
text-decoration:line-through;
font-family:arial;
font-size:spot;
}
a:hover
{
```

```
text-decoration:underline;
font-family:arial;
font-size:spot;
}
a:active
color:green;
text-decoration:underline;
font-family:arial;
font-size:spot;
}
</style>
</head>
<center>
<body bgcolor="pink">
<a href="wt.jpg" tagrget="_blank";>Link-1</a>
<br>><br>>
<a href="wt1.jpg" tagrget="_blank";>Link-2</a>
<br><br>>
</body>
</center>
</html>
Layers.html
<html>
<body bgcolor="white" align="left">
<h1 style="background-color:blue; position:relative; top:0; left:0; z-index:1; height:100;"> This is heading-
1.</h1>
<h2 style="background-color:green; position:relative; top:25; left:50; z-index:2; height:100;"> This is heading-
2.</h2>
<h3 style="background-color:red; position:relative; top:50; left:100; z-index:3; height:100;"> This is heading-
3.</h3>
</body>
</html>
```

color:blue;

Cursor.html

```
<html>
<body>
<br/>

<br/>
<br/>
<br/>
<br/>
<html>
<br/>
<br/>
<br/>
<br/>
<br/>
<br/>
<html>
<br/>
<b
```

My text with Instrucial

My text with feat calibre

My text with font-cooper



W.G.U WEB TECHNOLOGY Link-t Link-2



Links2



This is heading-1.

NOT-ALLOWED CURSOR

PROGRESS CURSOR

WAIT CURSOR

ZOOM-IN CURSOR

ZOOM-OUT CURSOR

NO-DROP CURSOR

MOVE CURSOR

DEFAULT CURSOR

SCROLL CURSOR

CROSSHAIR CURSOR

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EX.NO.04 DESIGNING A SIMPLE CALCULATOR USING JS

AIM:

To write a JavaScript to design a simple calculator to perform the following operations:

- i) Sum
- ii) Product
- iii) Difference
- iv) Quotient

ALGORITHM:

- 1) Open notepad or any text editors and type your HTML and JS programs in different files.
- 2) Declare and Initialize the Variables.
- 3) In HTML, JavaScript code is inserted between <script> and </script> tags.
- 4) Set the names and values for the attributes in the input tag.
- 5) Save the HTML file with .html extension.
- 6) In the JS file, if and switch statements are used in the function block.
- 7) Here the JavaScript HTML method used is getElementById().
- 8) Save the JS file with .js extension.
- 9) Run the program in the Web Browser.

RESULT:

Thus a simple calculator that performs sum, product, difference and quotient operations using JS was designed and executed successfully.

PROGRAM:

```
Calc.html
<html>
<script type=text/javascript src=calc.js>
</script>
<body>
<input type=text id=res size=16 onfocus="this.blur();">
>
<input type=button id=b1 value=0 size=2 onclick=f('0')>
<input type=button id=b2 value=1 size=2 onclick=f('1')>
<input type=button id=b3 value=2 size=2 onclick=f('2')>
<input type=button id=b4 value=+ size=2 onclick=f('+')>
<input type=button id=b5 value=3 size=2 onclick=f('3')>
<input type=button id=b6 value=4 size=2 onclick=f('4')>
<input type=button id=b7 value=5 size=2 onclick=f('5')>
<input type=button id=b8 value=- size=2 onclick=f('-')>
<input type=button id=b9 value=6 size=2 onclick=f('6')>
<input type=button id=b10 value=7 size=2 onclick=f('7')>
<input type=button id=b11 value=8 size=2 onclick=f('8')>
<input type=button id=b12 value=* size=2 onclick=f('*')>
>
<input type=button id=b13 value=9 size=2 onclick=f('9')>
<input type=button id=b14 value=+/- size=2 onclick=f('--')>
```

<input type=button id=b15 value='=' size=2 onclick=f('=')>

```
<input type=button id=b16 value='/' size=2 onclick=f('/')>
<input type=button value=Clear size=16 onclick=f('c')>
</body>
</html>
Calc.js
function f(d)
{
if(d=='c')
document.getElementById('res').value="";\\
return;
}
res=document.getElementById('res').value;
if(res==0 && d==0)
return;
if(d{=}{='}{+'} \parallel d{=}{='}{-'} \parallel d{=}{='}{*'} \parallel d{=}{='}{/'})
{
opr=d;
num=parseFloat(res);
document.getElementById('res').value=d;\\
return;
}
if(d=='=')
1
num1=parseFloat(res);
switch(opr)
case '+': ans=num+num1; break;
case '-': ans=num-num1; break;
```

```
case '*': ans=num*num1; break;
case '/': ans=parseInt(num/num1); break;
}
document.getElementById('res').value=ans;
return;
}
if(d=='--')
{
document.getElementById('res').value*=-1;
return;
}
if(!isNaN(document.getElementById('res').value))
document.getElementById('res').value+=d;
else
document.getElementById('res').value=d;
}
```

OUTPUT:

0	(5)	2	
3	4	5	1
0	7	8	E
9	14	=	17

SUM:

20			
0	[3]	2	Ū
3	[4]	5	
6	7	8	Ē
9	+/-		87

*			
0	1	2	1
3	4	5	-
0	7	8	1
0	454	[4]	17

10			
0	1	2	E
3	4	5	13
6	7	8	E
0	11/4	=	17

0	1	2	
3	4	5	E
6	7	8	18
9	14/4	3	ΠV

DIFFERENCE:

0	[1]	[2]	10
3	4	5	
6	7	8	Ĭ.
9	+/-	1	17

0	3	2	1
3	4	5	T
6	7	12	F
8		層	듄

0	1	2	
3	4	5	13
6	7	8	10
0	14/2	T	

0	1	2	13
3	4	5	Œ
6	7	8	1
9	144	Tv.	B

PRODUCT:

20			
0	[3]	2	Ŀ
3	4	5	
6	7	8	E
9	.01.	10	87

0	1	2	
3	4	5	ŀ
6	7	0	1
g	4/2	13	17

10			
0	1	2	E
3	4	5	
6	7	8	1
9	11/4	1	107

2011			
0	1	2	
3	4	5	E
6	7	18	ľ
9	44.	=	7

QUOTIENT:

20			
0	[1]	2	E
3	4	5	
6	7	8	Œ
9	1.46	-	13

0	3.3	[2]	D
3	4	5	
6	7	8	E
9	100	-	

10			
0	1	2	E
3	4	5	E
6	7	-	1
9	1460	雷	Ti

0	1	2	13
3	4	5	E
6	7	8	E
0	+/	100	17

EX.NO.05 VALIDATION OF WEB FORM USING DHTML

AIM:

To create client-side scripts for validating web form controls using DHTML.

ALGORITHM:

- 1) Open notepad or any text editors and type your HTML program.
- 2) Here, 2 HTML files are needed and use appropriate tags as required to create the web form.
- 3) JavaScript code is inserted between <script> and </script> tags in HTML.
- 4) Create a form by including all the elements of java script.
- 5) Create a button in such a way that when the button is clicked the form has to be validated (i.e. it has to check whether all fields in the form are filled and the data entered are valid).
- 6) Save the files with .html extension.
- 7) Run the program in the Web Browser.

RESULT:

Thus a client-side scripts for validating web form controls using DHTML was created and executed successfully.

PROGRAM:

```
Login.html
<html>
<head>
<title> LOGIN FORM VALIDATION</title>
<script>
function validate()
var username=document.getElementById("username").value;
var password=document.getElementById("password").value;
if(username==null||username==""){
alert("Please enter the username");
return false;
}
if(password==null||password==""){
alert("Please enter the Password");
return false;
}
alert("Login Successful");
}
</script>
</head>
<body>bodybgcolor="pink">
<font color="red"><h1 align="center">LOGIN FORM VALIDATION</h1></font>
<form name="f1" method="post">
<label>User Name</label>
<input type="text" name="username" id="username"><br>
<label>Password</label>
<input type="password" name="password" id="password"><br>
<input type="button" value="Login" onclick="validate()">&nbsp&nbsp
<input type="reset" name="r1" value="RESET">
</form>
```

```
</body>
</html>
Registration.html
<html>
<head>
<script type="text/javascript">
function checkfield(){
if(document.regfrm.fname.value.length==0){
alert("fill firstname field")
document.regfrm.fname.focus();
return;
}
if(document.regfrm.lname.value.length==0){
alert("fill lastname field")
document.regfrm.lname.focus();
return;
}
if(document.regfrm.eid.value.length==0){
alert("fill email-id")
document.regfrm.eid.focus();
return;
}
if(document.regfrm.zip.value.length==0){
alert("fill zip field")
document.regfrm.zip.focus();
return;
}
if (document.reg frm.phonenumber.value.length {==} 0) \{
alert("fill phone number field")
document.regfrm.phonenumber.focus();
return;
}
else{
alert("Succesfull");
```

```
}
}
</script>
</head>
<body>
<center>
<form name="regfrm" method="post">
<b>
<i><font face="monotype corsiva" color="black" size="7">
<u>Personal Registration Form</u>
</font>
</i>
</b>
<fort face="arial" color="bluishgreen" >
<b>You must complete fields marked with </b></font>
<font color="bluishgreen" face="times newroman">
*(star)</font>
Firstname</font>
<input type="text" name="fname" size="20">
<font color="red"> * </font>
<font face="timesnew roman" size="4">
Lastname
</font>
<input type="text" name="lname" size="20">
```

```
<font color="red"> * </font>
<font face="timesnewroman" size="4">
Industry
</font>
<fort face="timesnewroman"size="20">
<select size="1" name="industry">
<option value>Choose..</option>
<option value="Academic">Academic</option>
<option value="Corporate">Corporate</option>
<option value="Financial">Financial</option>
<option value="Government">Government</option>
<option value="Military">Military</option>
<option value="Research">Research</option>
<option value="Technology">Technology</option>
<option value="Transportation">Transportation</option>
</select></font>
<font face="timesnewroman" size="4">
Email-id
</font>
<input type="text" name="eid" size="20">
<font color="red"> * </font>
```

```
<font face="timesnewroman" size="4">
Country
</font>
<font face="timesnewroman" size="20">
<select size="1" name="country">
<option value>Choose..</option>
<option value="IND">INDIA</option>
<option value="US">AMERICA</option>
<option value="JPN">JAPAN</option>
<option value="AUS">AUSTRALIA</option>
<option value="FRN">FRANCE</option>
</select></font>
>
<font face="timesnewroman" size="4">
Organization
</font>
<input type="text" name="org" size="20">
="timesnewroman" size="4">
Address
</font>
```

```
<textarea rows="2" cols="16"></textarea>
<font face="timesnewroman" size="4">
Town/city
</font>
<input type="text" name="city" size="20">
<fort face="timesnewroman" size="4">
State
</font>
<input type="text" name="state" size="20">
<font face="timesnewroman" size="4">
zip/Postalcode
</font>
<input type="text" name="zip" size="20">
<font color="red">
```

```
</font>
<fort face="timesnewroman" size="4">
Phonenumber
</font>
<input type="text" name="phonenumber" size="20">
<font color="red">
</font>
<font face="timesnewroman" color="bluishgreen">
<input type="radio" name="submit">
I agree terms and Conditions<br>
<input type="button" value="submit" name="b1" onclick="checkfield()">
<input type="reset" value="cancel" name="b2">
</form>
</center>
</body>
</html>
```

O	T	1	m	D	T	1	
v	u		U		u		

LOGIN FORM VALIDATION

User Na		
Passwor		
Login	RESET	





		This page says	
		Login Successful	
	e kince@edu		6
Password	*******	OK	П
Loom	RESET		

Personal Registration Form

You must complete fields marked with *(star)

Firstname		
Lastname	•	
Industry	Choose. v	
Lastname Industry Email-id	*	
Country	Choose. •	
Organization		
Address		
Town/city		
Town/city State		
zip/Postalcode	•	
Phonemumber	*	

O I agree terms and Condition

				_
	This page says fill firstname field		Į.	
Firstname				
Lastname			9.	
Industry		Choose. v		
Email-id			*	
Country		Choose. v		
Organization				
Address				
Town/city				
State				
zip/Postalcode				
Phonemumber]*	ī

O 1 agree terms and Conditions [submit | cancel



O I agree terms and Conditions submit | caccel



Find the	Factorial of a Number(PHP/JavaScript)
Display	the Multiplication Table(PHP/JavaScript)
to Checl	Armstrong Number(PHP/JavaScript)
to Find	the Sum of Natural Numbers(PHP/JavaScript)
to Check	Whether a String is Palindrome or Not(PHP/JavaScript)
to Rever	se a String(PHP/JavaScript)

FACTORIAL OF A NUMBER USING JS:

```
<!DOCTYPE html>
<html>
<head>
 <title>Factorial Calculator</title>
 <script>
  function calculateFactorial() {
   var number = document.getElementById("number").value;
   var result = 1;
   if (!number || isNaN(number) || number <= 0) {
    document.getElementById("result").innerHTML = "Invalid input. Please
enter a positive integer.";
    return;
   for (var i = 2; i \le number; i++) {
    result *= i;
   document.getElementById("result").innerHTML = "Factorial of " + number
+ " is: " + result;
 </script>
</head>
<body>
 <h1>Factorial Calculator</h1>
 <label for="number">Enter a number:</label>
 <input type="text" id="number">
 <button onclick="calculateFactorial()">Calculate Factorial</button>
 </body>
</html>
```

OUTPUT:

Factorial Calculator

Enter a number:	5	Calculate Factorial
Factorial of 5 is:	120	

MULTIPLICATION TABLE USING JS <!DOCTYPE html> <html> <head> <title>Multiplication Table</title> <script> function generateTable() { var rows = parseInt(document.getElementById("rows").value); var columns = parseInt(document.getElementById("columns").value); var table = document.getElementById("table"); table.innerHTML = ""; for (var i = 1; $i \le rows$; i++) { var row = document.createElement("tr"); for (var j = 1; $j \le columns$; j++) { var cell = document.createElement("td"); cell.textContent = i * j;row.appendChild(cell); table.appendChild(row); }} </script> </head> <body> <h1>Multiplication Table Generator</h1> <label for="rows">Rows:</label> <input type="number" id="rows"> <label for="columns">Columns:</label> <input type="number" id="columns"> <button onclick="generateTable()">Generate Table/button> </body>

Multiplication Table Generator

</html>
OUTPUT:

```
Rows: 5 Columns: 10 Generate Table

1 2 3 4 5 6 7 8 9 10

2 4 6 8 10 12 14 16 18 20

3 6 9 12 15 18 21 24 27 30

4 8 12 16 20 24 28 32 36 40

5 10 15 20 25 30 35 40 45 50
```

```
ARMSTRONG NUMBER USING JS:
<!DOCTYPE html>
<html>
<head> <title>Armstrong Number Checker</title>
 <script>
  function isArmstrongNumber() {
   var number = parseInt(document.getElementById("number").value);
   var originalNumber = number;
   var sum = 0;
   if (!number || isNaN(number) || number <= 0) {
    document.getElementById("result").textContent = "Invalid input. Please
enter a positive integer.";
    return; }
   while (number > 0) {
    var digit = number % 10;
    sum += digit ** 3;
    number = Math.floor(number / 10);}
   if (sum === originalNumber) {
    document.getElementById("result").textContent = originalNumber + " is
an Armstrong number.";}
     else {
    document.getElementById("result").textContent = originalNumber + " is
not an Armstrong number.";}}
 </script>
</head>
<body>
 <h1>Armstrong Number Checker</h1>
 <label for="number">Enter a number:</label>
 <input type="number" id="number">
 <button onclick="isArmstrongNumber()">Check</button>
 </body>
</html>
OUTPUT:
```

Armstrong Number Checker

Enter a number:	153	Check
153 is an Armstr	ong number.	

SUM OF NATURAL NUMBERS USING JS:

```
<!DOCTYPE html>
<html>
<head> <title>Sum of Natural Numbers</title>
 <script>
  function calculateSum() {
   var number = parseInt(document.getElementById("number").value);
   var sum = 0;
   if (!number || isNaN(number) || number <= 0) {
    document.getElementById("result").textContent = "Invalid input. Please
enter a positive integer.";
    return;
   for (var i = 1; i \le number; i++) {
    sum += i;
   document.getElementById("result").textContent = "Sum of natural numbers
up to " + number + " is: " + sum;
 </script> </head>
<body>
 <h1>Sum of Natural Numbers</h1>
 <label for="number">Enter a number:</label>
 <input type="number" id="number">
 <button onclick="calculateSum()">Calculate Sum</button>
 </body>
</html>
```

OUTPUT:

Sum of Natural Numbers

Enter a number:	10	Calculate Sum
Sum of natural n	umbers up to 10 is: 55	

PALINDROME OR NOT USING JS:

```
<!DOCTYPE html>
<html>
<head><title>Palindrome Checker</title>
 <script>
  function checkPalindrome() {
   var input = document.getElementById("input").value.toLowerCase();
   var reversed = "";
   var cleanedInput = input.replace(/[^a-zA-Z0-9]/g, "");
   for (var i = \text{cleanedInput.length} - 1; i \ge 0; i - 1) {
    reversed += cleanedInput[i];
   if (cleanedInput === reversed) {
    document.getElementById("result").textContent = "\" + input + "\" is a
palindrome.";
   } else {
    document.getElementById("result").textContent = "\"" + input + "\" is not
a palindrome.";
 </script> </head>
<body>
 <h1>Palindrome Checker</h1>
 <label for="input">Enter a string:</label>
 <input type="text" id="input">
 <button onclick="checkPalindrome()">Check</button>
 </body>
</html>
```

OUTPUT:

Palindrome Checker

Enter a string:	madam	Check
	-	

[&]quot;madam" is a palindrome.

TO REVERSE A STRING USING JS:

```
<!DOCTYPE html>
<html>
<head>
 <title>String Reversal</title>
 <script>
  function reverseString() {
   var input = document.getElementById("input").value;
   var reversed = "";
   for (var i = input.length - 1; i \ge 0; i--) {
    reversed += input.charAt(i);
   document.getElementById("result").textContent = "Reversed string: " +
reversed;
 </script>
</head>
<body>
 <h1>String Reversal</h1>
 <label for="input">Enter a string:</label>
 <input type="text" id="input">
 <button onclick="reverseString()">Reverse</button>
 </body>
</html>
```

OUTPUT:

String Reversal

erse
ers

Reversed string: OLLEH

Find the	Factorial of a Number(PHP/JavaScript)
Display	the Multiplication Table(PHP/JavaScript)
to Chec	k Armstrong Number(PHP/JavaScript)
to Find	the Sum of Natural Numbers(PHP/JavaScript)
to Chec	k Whether a String is Palindrome or Not(PHP/JavaScript)
to Reve	rse a String(PHP/JavaScript)

FACTORIAL OF A NUMBER USING PHP:

```
<?php
function factorial($n) {
   if ($n === 0 || $n === 1) {
      return 1;
   } else {
      return $n * factorial($n - 1);
   }
}
$number = readline("Enter a number: ");
$result = factorial($number);
echo "The factorial of $number is: $result";
?>
```

```
php /tmp/z00e8zfQ0b.php
Enter a number: 5
The factorial of 5 is: 120
```

MULTIPLICATION TABLE USING PHP

```
<?php
$tableSize = 10;
echo "<h2>Multiplication Table</h2>";
echo "";
for ($row = 1; $row <= $tableSize; $row++) {
    echo "<tr>";
    for ($col = 1; $col <= $tableSize; $col++) {
        echo "<td>"";
    }
    echo "";
}
echo "";
?>
```

ARMSTRONG NUMBER USING PHP:

```
<?php
function isArmstrongNumber($number) {
  $originalNumber = $number;
  secult = 0;
  $numDigits = strlen((string)$number);
  while (\text{number} > 0) {
    digit = number \% 10;
    $result += pow($digit, $numDigits);
    number = (int)(number / 10);
  }
  return $originalNumber === $result;
$number = readline("Enter a number: ");
if (!is_numeric($number)) {
  echo "Invalid input. Please enter a valid number.";
  exit();
}
$number = intval($number);
if (isArmstrongNumber($number)) {
  echo "$number is an Armstrong number.";
} else {
  echo "$number is not an Armstrong number.";
?>
```

```
php /tmp/z00e8zfQ0b.php
Enter a number: 153
153 is an Armstrong number.
```

SUM OF NATURAL NUMBERS USING PHP:

```
<?php
$limit = readline("Enter the limit: ");
if (!is_numeric($limit) || $limit <= 0) {
    echo "Invalid input. Please enter a positive integer.";
    exit();
}
$limit = intval($limit);
$sum = 0;
for ($i = 1; $i <= $limit; $i++) {
    $sum += $i;
}
echo "The sum of natural numbers up to $limit is: $sum";
?>
```

```
php /tmp/z00e8zfQ0b.php
Enter the limit: 10
The sum of natural numbers up to 10 is: 55
```

PALINDROME OR NOT USING PHP:

```
<?php
function isPalindrome($string) {
    $string = strtolower(str_replace('', ", $string));
    $reverseString = strrev($string);
    return $string === $reverseString;
}
$input = readline("Enter a string: ");
if (isPalindrome($input)) {
    echo "$input is a palindrome.";
} else {
    echo "$input is not a palindrome.";
}
?>
```

```
php /tmp/z00e8zfQ0b.php
Enter a string: MADAM
MADAM is a palindrome.
```

TO REVERSE A STRING USING PHP:

```
<?php
function reverseString($string) {
    $length = strlen($string);
    $reversedString = ";
    for ($i = $length - 1; $i >= 0; $i--) {
        $reversedString .= $string[$i];
    }
    return $reversedString;
}
sinput = readline("Enter a string: ");
$reversedString = reverseString($input);
echo "Reversed string: " . $reversedString;
?>
```

OUTPUT:

Enter a string: Hello, world!
Reversed string: !dlrow ,olleH