**1) Write a JavaScript to perform Arithmetic Operations.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<script>

let a=parseInt(prompt("Enter the no 1:"));

let b=parseInt(prompt("Enter the no 2:"));

alert("Addition of no1 and no2 is:"+(a+b));

alert("Substraction of no1 and no2 is:"+(a-b));

alert("Multiplication of no1 and no2 is:"+(a\*b));

alert("Division of no1 and no2 is:"+(a/b));

</script>

</body>

</html>

**2) Write a JavaScript to display simple messages using JavaScript**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<script>

alert("Hello! Welcome to JavaScript.");

console.log("This is a simple message using JavaScript.");

document.write("KKWagh Polytechnic");

</script>

</body>

</html>

**3) Write a JavaScript to find Even and ODD Number**

<!DOCTYPE html>

<html>

<head>

<title>Even or Odd Checker</title>

</head>

<body>

<script>

let number = parseInt(prompt("Enter a number:"));

if (number % 2 === 0)

{

document.write(number + " is an Even number.");

}

else

{

document.write(number + " is an Odd number.");

}

</script>

</body>

</html>

**4) Write a JavaScript to check the number is positive or negative**

<!DOCTYPE html>

<html>

<head>

<title>Positive or Negative Checker</title>

</head>

<body>

<script>

let number = parseFloat(prompt("Enter a number:"));

if (number > 0)

{

alert(number + " is a Positive number.");

}

else if (number < 0)

{

alert(number + " is a Negative number.");

}

else

{

alert("The number is Zero.");

}

</script>

</body>

</html>

**5) Write a JavaScript to perform any 4 Array functions.**

<html>

<head>

</head>

<body>

<script>

let Name=["Rutik", "Yash", "Harshad", "Soham", "Malhar"];

let Marks=[50,62,82,90,45];

document.write("Original array is: "+Name);

Name.push("Sumit");

document.write("<br> Element after push: "+Name);

Name.unshift("Yash");

document.write("<br> Element after unshift: " + Name);

Name.splice(1,1, "Rushi");

document.write("<br> Element after Splice:"+ Name);

let a=Name.concat(Marks);

document.write("<br> Element after concat: " + a);

Name.sort();

document.write("<br> Sorted element name list: "+ Name.sort());

Marks.sort();

document.write("<br> Sorted Mark list:"+ Marks.sort((a,b)=>a-b));

Name.reverse();

document.write("<br> Reverse Elements: "+ Name);

let b=Name.join(" \* ");

document.write("<br> Elements after join: " + b);

Name.shift();

document.write("<br> Elements after shift: "+Name);

Name.pop();

document.write("<br> Elements after pop: "+ Name);

let c=Name.slice(2);

document.write("<br> Elements after slice: " + c);

document.write("<br> Elements includes or not: "+ Marks.includes(90));

document.write("<br> Elements after Delete: " + delete Name[0]);

document.write("<br> Element index: " + Name.indexOf("Rushi"));

</script>

</body>

</html>

**6) Write a JavaScript to perform any 4 String functions.**

<html>

<head></head>

<body>

<script>

let str ="Rutik Gaikwad"

let str1="Jivhale"

document.write(str);

document.write("<br>indexOf="+str.indexOf('u'))

document.write("<br>lastIndexOf="+str.lastIndexOf('i'))

document.write("<br>Search="+str.search("Gaikwad"))

document.write("<br>slice="+str.slice(2,7))

document.write("<br>substring="+str.substring(2,7))

document.write("<br>Substr="+str.substr(2,4));

document.write("<br>replace="+str.replace("Rutik", "Aniket"));

document.write("<br>toUppercase="+str.toUpperCase());

document.write("<br>toLowercase="+str.toLowerCase());

document.write("<br>concat="+str.concat("", str1));

document.write("<br>trim="+str.trim())

document.write("<br>charAt="+str.charAt(3));

document.write("<br>charCodeAt="+str.charCodeAt(4));

</script>

</body>

</html>

**7) Write a JavaScript to find cube of a number using function.**

<!DOCTYPE html>

<html>

<head>

<title>Cube of Entered Number</title>

</head>

<body>

<script>

function cube(num)

{

return num \* num \* num;

}

let number = parseFloat(prompt("Enter a number to find its cube:"));

let result = cube(number);

alert("The cube of " + number + " is " + result);

</script>

</body>

</html>

**8) Write a JavaScript to find multiplication of a number using function**

<!DOCTYPE html>

<html>

<head>

</head>

<body>

<script>

function multiply(num, multiplier)

{

return num \* multiplier;

}

let number = parseFloat(prompt("Enter a number to multiply:"));

let multiplier = 5;

let result = multiply(number, multiplier);

alert("The result of multiplying " + number + " by " + multiplier + " is " + result);

</script>

</body>

</html>

**9) Write a JavaScript to demonstrate use of Switch-case. Perform any 3 cases. Assume suitable Data**

<!DOCTYPE html>

<html>

<head>

<script>

function checkDay()

{

let day = parseInt(document.getElementById("day").value);

let message = "";

switch (day)

{

case 1:

message = "Monday";

break;

case 2:

message = "Tuesday";

break;

case 3:

message = "Wednesday";

break;

case 4:

message = "Thursday";

break;

case 5:

message = "Friday";

break;

case 6:

message = "Saturday";

break;

case 7:

message = "Sunday";

break;

default:

message = "Invalid day! Enter a number between 1 and 7.";

}

alert(message);

}

</script>

</head>

<body>

<h2>Switch-Case Example</h2>

<label>Enter a day number (1-7):</label> <input type="text" id="day"><br>

<button onclick="checkDay()">Check Day</button>

</body>

</html>

**10) Create a webpage to design simple registration form with all major controls.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<h2>Registration Form</h2>

<form action="#" method="post">

<label for="name">Full Name:</label><br>

<input type="text" id="name" name="name" placeholder="Enter your full name" required><br><br>

<label for="email">Email Address:</label><br>

<input type="email" id="email" name="email" placeholder="Enter your email" required><br><br>

<label for="password">Password:</label><br>

<input type="password" id="password" name="password" placeholder="Create a password" required><br><br>

<label>Gender:</label><br>

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

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

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

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

<input type="radio" id="other" name="gender" value="Other">

<label for="other">Other</label><br><br>

<label>Interests:</label><br>

<input type="checkbox" id="reading" name="interest" value="Reading">

<label for="reading">Reading</label>

<input type="checkbox" id="traveling" name="interest" value="Traveling">

<label for="traveling">Traveling</label>

<input type="checkbox" id="coding" name="interest" value="Coding">

<label for="coding">Coding</label><br><br>

<label for="country">Country:</label><br>

<select id="country" name="country" required>

<option value="india">India</option>

<option value="usa">United States</option>

<option value="uk">United Kingdom</option>

<option value="australia">Australia</option>

</select><br><br>

<label for="message">Additional Information:</label><br>

<textarea id="message" name="message" placeholder="Enter any additional information" rows="4"></textarea><br><br>

<button type="submit">Register</button>

</form>

</body>

</html>

**12) Write a JavaScript to demonstrate use of onFocus Event**.

1.

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>onFocus Event</title>**

**<script>**

**function highlightInput() {**

**alert("Input field is now focused!");**

**}**

**</script>**

**</head>**

**<body>**

**<h2>onFocus Event</h2>**

**<label>Enter text:</label>**

**<input type="text" onfocus="highlightInput()">**

**</body>**

**</html>**

**2.** <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>onFocus Event Example</title>

<script>

function highlightField(element) {

element.style.backgroundColor = "#f0f8ff"; // Light blue

}

function resetField(element) {

element.style.backgroundColor = "#abcd"; // Reset to default\

}

</script>

</head>

<body>

<h1>onFocus Event Example</h1>

<label for="email">Email:</label>

<input type="email" id="email" onfocus="highlightField(this)" onblur="resetField(this)">

</body>

</html>

**11) Write a JavaScript to demonstrate use of onBlur Event**.

<!DOCTYPE html>

<html>

<head>

<title>onBlur Event</title>

<script>

function validateInput() {

let input = document.getElementById("inputField").value;

if (input === "") {

alert("This field cannot be empty!");

}

}

</script>

</head>

<body>

<h2>onBlur Event</h2>

<label>Enter something:</label>

<input type="text" id="inputField" onblur="validateInput()">

</body>

</html>

**13) Write a JavaScript to demonstrate use of onChange Event.**

**1.**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>Document</title>**

**</head>**

**<body>**

**<select id="colorSelect" onchange="changeColor()">**

**<option value="red">Red</option>**

**<option value="green">Green</option>**

**<option value="blue">Blue</option>**

**<option value="yellow">Yellow</option>**

**</select>**

**<script>**

**function changeColor() {**

**let color = document.getElementById("colorSelect").value;**

**document.body.style.backgroundColor = color;**

**}**

**</script>**

**</body>**

**</html>**

**2.**

<html>

<body>

<script>

function getPage(choice)

{

page=choice.options[choice.selectedIndex].value;

if(page!= "")

{

window.location=page;

}

}

</script>

Select Your Favourite Website:

<select name="MenuChoice" onchange="getPage(this)">

<option value="https://www.google.com">Google</option>

<option value="https://www.msbte.org.in">MSBTE</option>

<option value="https://www.yahoo.com">Yahoo</option>

</select>

</form>

</body>

</html>

**14) Write a JavaScript to demonstrate any 4 Date class functions.**

<!DOCTYPE html>

<html>

<head>

<title>Date Class Functions</title>

<script>

function displayDateFunctions() {

let date = new Date();

alert("Current Date: " + date);

alert("Year: " + date.getFullYear());

alert("Month: " + (date.getMonth() + 1)); // Month is zero-based

alert("Day: " + date.getDate());

alert("Time: " + date.toLocaleTimeString());

}

</script>

</head>

<body>

<h2>Date Class Functions</h2>

<button onclick="displayDateFunctions()">Show Date Functions</button>

</body>

</html>

**15) Write a JavaScript to demonstrate any 4 Math class functions**

<!DOCTYPE html>

<html>

<head>

<title>Math Class Functions</title>

<script>

function displayMathFunctions() {

let num = 7.5;

alert("Number: " + num);

alert("Rounded: " + Math.round(num));

alert("Square Root: " + Math.sqrt(num));

alert("Power (2^3): " + Math.pow(2, 3));

alert("Random Number (0-1): " + Math.random());

}

</script>

</head>

<body>

<h2>Math Class Functions</h2>

<button onclick="displayMathFunctions()">Show Math Functions</button>

</body>

</html>

**16) Write a JavaScript to demonstrate use of Window.open() method.**

<!DOCTYPE html>

<html>

<head>

<title>window.open() Method</title>

<script>

function openNewWindow() {

window.open("https://www.google.com", "\_blank", "width=500,height=500");

}

</script>

</head>

<body>

<h2>window.open() Method</h2>

<button onclick="openNewWindow()">Open New Window</button>

</body>

</html>

**17) Write a JavaScript to create a Cookie.**

<!DOCTYPE html>

<html>

<head>

<title>Create a Cookie</title>

<script>

function createCookie() {

document.cookie = "username=JohnDoe; expires=Fri, 31 Dec 2024 12:00:00 UTC; path=/";

alert("Cookie Created: " + document.cookie);

}

</script>

</head>

<body>

<h2>Create a Cookie</h2>

<button onclick="createCookie()">Create Cookie</button>

</body>

</html>

**18) Write a JavaScript to find a character is vowel or not using regular Expression.**

<!DOCTYPE html>

<html>

<head>

<title>Check Vowel</title>

<script>

function isVowel() {

let char = document.getElementById("char").value.toLowerCase();

let regex = /^[aeiou]$/;

if (regex.test(char)) {

alert("The character is a vowel.");

} else {

alert("The character is not a vowel.");

}

}

</script>

</head>

<body>

<h2>Check if Character is Vowel</h2>

<label>Enter a single character:</label>

<input type="text" id="char" maxlength="1"><br>

<button onclick="isVowel()">Check</button>

</body>

</html>

**19) Write a JavaScript to find a character is in upper case or not using regular Expression.**

<!DOCTYPE html>

<html>

<head>

<title>Check Uppercase</title>

<script>

function checkUpperCase() {

let char = document.getElementById("char").value;

let regex = /^[A-Z]$/;

if (regex.test(char)) {

alert("The character is in uppercase.");

} else {

alert("The character is not in uppercase.");

}

}

</script>

</head>

<body>

<h2>Check if Character is Uppercase</h2>

<label>Enter a single character:</label>

<input type="text" id="char" maxlength="1"><br>

<button onclick="checkUpperCase()">Check</button>

</body>

</html>

**20) Write a JavaScript to find a character is in lower case or not using regular Expression.**

<!DOCTYPE html>

<html>

<head>

<title>Check Lowercase</title>

<script>

function checkLowerCase() {

let char = document.getElementById("char").value;

let regex = /^[a-z]$/;

if (regex.test(char)) {

alert("The character is in lowercase.");

} else {

alert("The character is not in lowercase.");

}

}

</script>

</head>

<body>

<h2>Check if Character is Lowercase</h2>

<label>Enter a single character:</label>

<input type="text" id="char" maxlength="1"><br>

<button onclick="checkLowerCase()">Check</button>

</body>

</html>

**21) Create a webpage with Rollover Effect**

<html>

<head>

</head>

<body>

<img src="image1.png" name="red" height=400, width=500 id="pd">

<a onmouseover=document.red.src="image3.png"> flower </a>

<script>

</script>

</body>

</html>

**22) Develop a webpage for implementing pulldown menu. Assume suitable data.**

**1.**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Pulldown Menu Example</title>

</head>

<body>

<h2>Pulldown Menu Example</h2>

<p>Select your favorite programming language:</p>

<!-- Pulldown Menu -->

<select id="language" onchange="showSelection()">

<option value="" disabled selected>Choose a language</option>

<option value="JavaScript">JavaScript</option>

<option value="Python">Python</option>

<option value="Java">Java</option>

<option value="C++">C++</option>

<option value="Ruby">Ruby</option>

</select>

<p id="result"></p>

<script>

// Function to display the selected option

function showSelection() {

var selected = document.getElementById("language").value;

document.getElementById("result").innerText = "You selected: " + selected;

}

</script>

</body>

</html>

**2.**

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>Pulldown Menu</title>**

**<script>**

**function displaySelection() {**

**let option = document.getElementById("menu").value;**

**alert("You selected: " + option);**

**}**

**</script>**

**</head>**

**<body>**

**<h2>Pulldown Menu</h2>**

**<label>Select an option:</label>**

**<select id="menu" onchange="displaySelection()">**

**<option value="Option 1">Option 1</option>**

**<option value="Option 2">Option 2</option>**

**<option value="Option 3">Option 3</option>**

**</select>**

**</body>**

**</html>**

**23) Develop a webpage for disabling a mouse right click.**

<!DOCTYPE html>

<html>

<head>

<title>Disable Right Click</title>

<script>

function disableRightClick(event)

{

event.preventDefault();

alert("Right click is disabled!");

}

</script>

</head>

<body oncontextmenu="disableRightClick(event)">

<h2>Disable Right Click</h2>

<p>Try to right-click anywhere on this page.</p>

</body>

</html>

**24) Develop a webpage for creating rotating (changing) banner.**

<html >

<head>

<title>Banner Ads</title>

<script>

Banners = new Array('image1.png','image2.png','image3.png');

CurrentBanner = 0;

function DisplayBanners()

{

if (document.images);

{

CurrentBanner++;

if (CurrentBanner == Banners.length)

{

CurrentBanner = 0;

}

document.RotateBanner.src= Banners[CurrentBanner];

setTimeout("DisplayBanners()",1000);

}

}

</script>

</head>

<body onload="DisplayBanners()" >

<center>

<img src="image1.png" width="400"

height="75" name="RotateBanner" />

</center>

</body>

</html>

**25) Develop a webpage for creating slideshow using banner.**

<!DOCTYPE html>

<html>

<head>

<title>Image Slideshow</title>

<script>

let images = ["image1.png", "image2.png", "image3.png"];

let index = 0;

function showNext() {

index = (index + 1) % images.length;

document.getElementById("slideshow").src = images[index];

}

function showPrevious() {

index = (index - 1 + images.length) % images.length;

document.getElementById("slideshow").src = images[index];

}

</script>

</head>

<body>

<h2>Image Slideshow</h2>

<img id="slideshow" src="image1.png" alt="Slideshow" width="400" height="200"><br>

<button onclick="showPrevious()">Previous</button>

<button onclick="showNext()">Next</button>

</body>

</html>

**26) Accept full name of user in single text box and separate first, middle and last name from accepted name and display it in capitalized form.**

<!DOCTYPE html>

<html>

<head>

<title>Separate Name</title>

<script>

function separateName() {

let fullName = document.getElementById("fullName").value.trim();

let nameParts = fullName.split(" ");

let first = nameParts[0]?.toUpperCase() || "N/A";

let middle = nameParts[1]?.toUpperCase() || "N/A";

let last = nameParts[2]?.toUpperCase() || "N/A";

alert(`First Name: ${first}\nMiddle Name: ${middle}\nLast Name: ${last}`);

}

</script>

</head>

<body>

<h2>Separate Full Name</h2>

<label>Enter Full Name:</label>

<input type="text" id="fullName"><br>

<button onclick="separateName()">Separate Name</button>

</body>

</html>

**27) WAP to replace following specified string value with another value in the string String = “I will fail”Replace = “fail” by “pass”**

<!DOCTYPE html>

<html>

<head>

<title>Replace String</title>

<script>

function replaceString() {

let str = "I will fail";

let replacedStr = str.replace("fail", "pass");

alert("Original String: " + str + "\nModified String: " + replacedStr);

}

</script>

</head>

<body>

<h2>Replace String Value</h2>

<button onclick="replaceString()">Replace</button>

</body>

</html>

<html>

<body>

<script>

var myStr = "I will fail";

var newStr = myStr.replace("fail", "pass");

document.write(newStr);

</script>

</body>

</html>

**28) Create a slideshow with the group of three images, also simulate the next and previous transition between slides in your JavaScript.**

**1.**

<html>

<head>

<script>

pics = new Array('image1.png' , 'image2.png' , 'image3.png');

count = 0;

function slideshow(status)

{

if (document.images)

{

count = count + status;

if (count > (Rutik.length - 1))

{

count = 0;

}

if (count < 0)

{

count = Rutik.length - 1;

}

documet.imag1.src = Rutik[count];

}

}

</script>

</head>

<body>

<img src="image1.png" width="200" name="img1">

<br>

<input type="button" value="Next" onclick="slideshow(1)">

<input type="button" value="Back" onclick="slideshow(-1)">

</body>

</html>

**2.**

<!DOCTYPE html>

<html>

<head>

<title>Image Slideshow</title>

<script>

let images = ["image1.png", "image2.png", "image3.png"];

let index = 0;

function showNext() {

index = (index + 1) % images.length;

document.getElementById("slideshow").src = images[index];

}

function showPrevious() {

index = (index - 1 + images.length) % images.length;

document.getElementById("slideshow").src = images[index];

}

</script>

</head>

<body>

<h2>Image Slideshow</h2>

<img id="slideshow" src="image1.png" alt="Slideshow" width="400" height="200"><br>

<button onclick="showPrevious()">Previous</button>

<button onclick="showNext()">Next</button>

</body>

</html>

**29) Write HTML Script that displays drop-down-list containing options New Delhi, Mumbai, Bangalore. Write proper JavaScript such that when the user selects any options corresponding description of about 20 words and image of the city appear in table which appears below on the same page.**

<!DOCTYPE html>

<html>

<head>

<title>City Dropdown</title>

<script>

function displayCityInfo() {

let city = document.getElementById("cityDropdown").value;

let info = "";

let image = "";

switch (city) {

case "New Delhi":

info = "New Delhi is the capital of India.";

image = "delhi.jpg";

break;

case "Mumbai":

info = "Mumbai is the financial capital of India.";

image = "mumbai.jpg";

break;

case "Bangalore":

info = "Bangalore is known as the Silicon Valley of India.";

image = "bangalore.jpg";

break;

default:

info = "Select a city to view details.";

}

document.getElementById("cityInfo").innerText = info;

document.getElementById("cityImage").src = image;

}

</script>

</head>

<body>

<h2>City Dropdown</h2>

<label>Select a city:</label>

<select id="cityDropdown" onchange="displayCityInfo()">

<option value="">--Select--</option>

<option value="New Delhi">New Delhi</option>

<option value="Mumbai">Mumbai</option>

<option value="Bangalore">Bangalore</option>

</select>

<p id="cityInfo">City information will appear here.</p>

<img id="cityImage" src="" alt="City Image" width="300" height="200">

</body>

</html>

**30) Write a JavaScript function that checks whether a passed string is palindrome or not.**

<!DOCTYPE html>

<html>

<head>

<title>Palindrome Checker</title>

<script>

function checkPalindrome() {

let str = document.getElementById("string").value.toLowerCase();

let reversed = str.split("").reverse().join("");

if (str === reversed) {

alert("The string is a palindrome.");

} else {

alert("The string is not a palindrome.");

}

}

</script>

</head>

<body>

<h2>Palindrome Checker</h2>

<label>Enter a string:</label>

<input type="text" id="string"><br>

<button onclick="checkPalindrome()">Check</button>

</body>

</html>

**31) Write a HTML script which displays 2 radio buttons to the users for fruits and vegetables and 1 option list. When user select fruits radio button option list should present only fruits names to the user & when user select vegetable radio button option list should present only vegetable names to the user**

<!DOCTYPE html>

<html>

<head>

<title>Fruits and Vegetables</title>

<script>

function updateOptions() {

let optionsList = document.getElementById("options");

optionsList.innerHTML = ""; // Clear previous options

if (document.getElementById("fruits").checked) {

let fruits = ["Apple", "Banana", "Cherry"];

fruits.forEach(fruit => {

let option = document.createElement("option");

option.text = fruit;

optionsList.add(option);

});

} else if (document.getElementById("vegetables").checked) {

let vegetables = ["Carrot", "Broccoli", "Spinach"];

vegetables.forEach(veg => {

let option = document.createElement("option");

option.text = veg;

optionsList.add(option);

});

}

}

</script>

</head>

<body>

<h2>Fruits and Vegetables Selector</h2>

<input type="radio" id="fruits" name="type" onclick="updateOptions()"> Fruits<br>

<input type="radio" id="vegetables" name="type" onclick="updateOptions()">

Vegetables<br>

<select id="options"></select>

</body>

</html>

**32) Write a Java script to modify the status bar using on MouseOver and on MouseOut with links. When the user moves his mouse over the links, it will display “MSBTE” in the status bar. When the user moves his mouse away from the link the status bar will display nothing.**

<!DOCTYPE html>

<html>

<head>

<title>Status Bar</title>

<script>

function showStatus(message) {

window.status = message;

}

</script>

</head>

<body>

<h2>Status Bar Example</h2>

<a href="#" onmouseover="showStatus('MSBTE')" onmouseout="showStatus('')">Hover

over me</a>

</body>

</html>

**33) Write a javascript that displays all properties of window object**

<html>

<body>

<script type="text/javascript">

for (var X in window)

{

document.write("<br>"+X);

}

</script>

</body>

</html>

**34) Write a function that prompts the user for a color and uses what they select to set the background color of the new webpage opened.**

<!DOCTYPE html>

<html>

<head>

<title>Change Background Color</title>

<script>

function changeColor() {

let color = prompt("Enter a color name (e.g., red, blue, green):");

document.body.style.backgroundColor = color;

}

</script>

</head>

<body>

<h2>Change Background Color</h2>

<button onclick="changeColor()">Change Color</button>

</body>

</html>

**35) Write a JavaScript program that create a scrolling text on the status line of a window**

<!DOCTYPE html>

<html>

<head>

<title>Scrolling Text</title>

<script>

let text = "Welcome to the scrolling text demo! ";

let index = 0;

function scrollText() {

window.status = text.substring(index) + text.substring(0, index);

index = (index + 1) % text.length;

}

setInterval(scrollText, 200);

</script>

</head>

<body>

<h2>Scrolling Text on Status Line</h2>

<p>Check the browser's status bar to see the scrolling text.</p>

</body>

</html>

**36) Develop a JavaScript Program to Create Rotating Banner Ads with URL Links. Create a slideshow with the group of four images, also simulate the next and previous transition between slides in your JavaScript**

<html>

<body onload="ShowBanners()">

<a href="javascript:ShowLinks()">

<img src="clang.jpg" width="500" height="300" name="ChangeBanner"/>

</a>

<script language="Javascript">

MyBanners=new Array('clang.png','cpp.png','java.png')

MyBannerLinks=new

Array('http://msbte.org.in','http://www.google.com','http://www.gmail.com')

banner=0

function ShowLinks()

{

document.location.href=MyBannerLinks[banner]

}

function ShowBanners()

{

if(document.images)

{

banner++

if (banner==MyBanners.length)

{

banner=0

}

document.ChangeBanner.src=MyBanners[banner]

setTimeout("ShowBanners()",5000)

}

}

</script>

</body>

</html>

**37) Write a webpage that accepts Username and adharcard as input texts. When the user enters adhaarcard number ,the JavaScript validates card number and diplays whether card number is valid or not. (Assume valid adhaar card format to be nnnn.nnnn.nnnn or nnnn-nnnn-nnnn)**

<!DOCTYPE html>

<html>

<head>

<title>Aadhar Card Validation</title>

<script>

function validateAadhar() {

let aadhar = document.getElementById("aadhar").value;

let regex = /^\d{4}[-.]?\d{4}[-.]?\d{4}$/;

if (regex.test(aadhar)) {

alert("Valid Aadhar Card Number");

} else {

alert("Invalid Aadhar Card Number");

}

}

</script>

</head>

<body>

<h2>Aadhar Card Validation</h2>

<label>Enter Aadhar Number:</label>

<input type="text" id="aadhar"><br>

<button onclick="validateAadhar()">Validate</button>

</body>

</html>

**38) Write HTML Script that displays textboxes for accepting Name, middlename, Surname of the user and a Submit button. Write proper JavaScript such that when the user clicks on submit button: i) All texboxes must get disabled and change the color to “RED” and with respective labels.**

<!DOCTYPE html>

<html>

<head>

<title>Disable Textboxes</title>

<script>

function disableInputs() {

let inputs = document.querySelectorAll("input");

inputs.forEach(input => {

input.disabled = true;

input.style.backgroundColor = "red";

});

}

</script>

</head>

<body>

<h2>Disable Textboxes on Submit</h2>

<label>First Name:</label>

<input type="text"><br>

<label>Middle Name:</label>

<input type="text"><br>

<label>Last Name:</label>

<input type="text"><br>

<button onclick="disableInputs()">Submit</button>

</body>

</html>

**39) Write a JavaScript program to find the area of a triangle where lengths of the three of its sides are 5, 6, and 7.**

<!DOCTYPE html>

<html>

<head>

<title>Triangle Area</title>

<script>

function calculateArea() {

let a = 5, b = 6, c = 7;

let s = (a + b + c) / 2;

let area = Math.sqrt(s \* (s - a) \* (s - b) \* (s - c));

alert("Area of the triangle: " + area.toFixed(2));

}

</script>

</head>

<body>

<h2>Calculate Triangle Area</h2>

<button onclick="calculateArea()">Calculate Area</button>

</body>

</html>

**40) Write a script for creating following frame structure**

<html>

<head>

<title>Frame Demo</title>

</head>

<body>

<table border="1">

<tr>

<td align="center" colspan="2">

FRAME 1

</td>

</tr>

<tr>

<td>

FRAME 2

<ul>

<li>

<a href="fruits.html" target="mainframe">FRUITS</a>

</li>

<li>

<a href="flowers.html" target="mainframe">FLOWERS</a>

</li>

<li>

<a href="cities.html" target="mainframe">CITIES</a>

</li>

</ul>

</td>

<td>

FRAME 3<BR>

<iframe name="mainframe"></iframe>

</td>

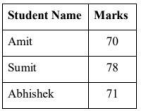
</tr>

</table>

</body>

</html>

**41) Write a JavaScript program that will display list of student in ascending order according to the marks & calculate the average performance of the class.**



<html>

<body>

<script>

var students = [["Amit", 70],["Sumit", 78],["Ashishek", 71],];

var Avgmarks = 0;

for (var i = 0; i < students.length; i++) {

Avgmarks += students[i][1];

for (var j = i + 1; j < students.length; j++) {

if (students[i] > students[j]) {

a = students[i];

students[i] = students[j];

students[j] = a

}

}

}

var avg = Avgmarks / students.length;

document.write("Average grade: " + Avgmarks / students.length);

document.write("<br><br>");

for (i = 0; i < students.length; ++i){

document.write(students[i]+"<br>")

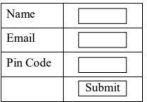
}

</script>

</body>

</html>

**42) Write HTML script that will display following structure**

****

**Write the JavaScript code for below operations :**

**(1) Name, Email & Pin Code should not be blank.**

**(2) Pin Code must contain 6 digits & it should not be accept any characters**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=\, initial-scale=1.0">

<title>Document</title>

<style>

tr,table,td

{

border: solid black 1px;

}

td{

padding: 10px; ;

}

</style>

</head>

<body>

<table>

<tbody>

<tr>

<td>Name:</td>

<td><input type="text" id="name"></td>

</tr>

<tr>

<td>Email:</td>

<td><input type="email" id="email"></td>

</tr>

<tr>

<td>Pin code:</td>

<td><input type="number" id="pin"></td>

</tr>

</tbody>

</tr>

<tr>

<td></td>

<td><input type="button" onclick="submit()" value="Submit"></td>

</tr>

</tbody>

</table>

<script>

function submit()

{

var n=document.getElementById("name").value

var e=document.getElementById("email").value

var p=document.getElementById("pin").value

if(n.length==0 ||e.length==0 ||p.length==0 )

{

alert("please Enter value in all fields")

}

else

{

var patttern =/^[4]{1}[0-9]{5}$/;

if(patttern.test(p))

{

alert("Data Submit Successfully")

}

else

{

alert("Wrong Pin")

}

}

}

</script>

</body>

</html>

**43.**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

    <frameset rows="30%,\*" border="1">

        <frame src="Frame1.html" name="a">

            <frameset cols="65%,\*">

            <frame src="Frame2.html" name="b">

            <frame src="Frame3.html" name="c">

            </frameset>

    </frameset>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <center><h1>TYIF</h1></center>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <h1 align="center">Operating System</h1>

    <a href="www.google.com" target="c">\* Chapter1</a><br>

    <a href="www.amazon.com" target="c">\* Chapter2</a>

</body>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <center><h1>FRAME3</h1></center>

</html>