1)

<html>

<head>

<title>Pop-up Message Box</title>

</head>

<body>

<button id="myButton">Button</button>

<script>

const button = document.getElementById("myButton");

button.addEventListener("click", function() {

alert("This is a alert");

});

</script>

</body>

</html>

2)

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Document</title>

</head>

</body>

<script>

window.onload=function(){

getMarks();

}

function getMarks(){

var total=0;

for(var i=0;i<5;i++){

var marks=parseInt(window.prompt("Enter marks: "));

total+=marks;

}

var average=total/5;

document.write("Total: ",total);

document.write("<br>");

document.write("Average: ",total/5);

var button=document.createElement("button");

button.innerHTML="GRADE";

button.onclick=function(){

if(average>30)

window.alert("congratulations!");

eles

window.alert("Better luck next time!");

}

document.body.appendchild("button");

}

<button type="submit" value="submit">Submit</button>

</script>

</body>

</html>

3)

<html>

<head>

<title>Change Button Background Color</title>

<style>

button {

background-color: blue;

padding: 10px;

cursor: pointer;

}

</style>

</head>

<body>

<button id="myButton">Button</button>

<script>

const button = document.getElementById("myButton");

button.addEventListener("mouseover", function() {

button.style.backgroundColor = "red";

});

button.addEventListener("mouseout", function() {

button.style.backgroundColor = "blue";

});

</script>

</body>

</html>

4)

<html>

<head>

<title>Calculate Circle Area</title>

</head>

<body>

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

<script>

function calculateArea() {

const radius = parseFloat(prompt("Enter the radius of the circle:"));

if (isNaN(radius) || radius <= 0) {

alert("Please enter a valid positive number for the radius.");

return;

}

const pi = 22 / 7;

const area = pi \* Math.pow(radius, 2);

alert(`The area of the circle with radius ${radius} is ${area.toFixed(2)}`);

}

</script>

</body>

</html>

5)

<!DOCTYPE html>

<html>

<head>

<title>Day and Week</title>

</head>

<body>

<script>

function getDayName(dayNumber) {

switch (dayNumber) {

case '1':

return 'Monday';

case '2':

return 'Tuesday';

case '3':

return 'Wednesday';

case '4':

return 'Thursday';

case '5':

return 'Friday';

case '6':

return 'Saturday';

case '7':

return 'Sunday';

default:

return 'Invalid input. Please enter a number from 1 to 7.';

}

}

var userInput = prompt('Enter a number from 1 to 7 to get the corresponding day of the week:');

if (userInput !== null) {

var dayNumber = parseInt(userInput, 10);

if (!isNaN(dayNumber) && dayNumber >= 1 && dayNumber <= 7) {

var dayName = getDayName(userInput);

alert(dayName);

} else {

alert('Invalid input. Please enter a number from 1 to 7.');

}

}

</script>

</body>

</html>

6)

<html>

<head>

<title>Redirect to Google</title>

</head>

<body>

<!-- Button to trigger the action -->

<button id="googleButton">Google</button>

<script>

function redirectToGoogle() {

var userChoice = confirm('Do you want to visit Google?');

if (userChoice) {

window.location.href = 'https://www.google.com';

} else {

alert('You decided to stay.');

}

}

document.getElementById('googleButton').addEventListener('click', redirectToGoogle);

</script>

</body>

</html>

7)

<html>

<head>

<title>Mathematical Operations</title>

</head>

<body>

<script>

function addition() {

var num1 = parseFloat(prompt('Enter the first number for addition:'));

var num2 = parseFloat(prompt('Enter the second number for addition:'));

if (!isNaN(num1) && !isNaN(num2)) {

var result = num1 + num2;

alert('Addition result: ' + result);

} else {

alert('Invalid input. Please enter valid numbers.');

}

}

function subtraction() {

var num1 = parseFloat(prompt('Enter the first number for subtraction:'));

var num2 = parseFloat(prompt('Enter the second number for subtraction:'));

if (!isNaN(num1) && !isNaN(num2)) {

var result = num1 - num2;

alert('Subtraction result: ' + result);

} else {

alert('Invalid input. Please enter valid numbers.');

}

}

function division() {

var num1 = parseFloat(prompt('Enter the numerator for division:'));

var num2 = parseFloat(prompt('Enter the denominator for division:'));

if (!isNaN(num1) && !isNaN(num2)) {

if (num2 !== 0) {

var result = num1 / num2;

alert('Division result: ' + result);

} else {

alert('Error: Division by zero is not allowed.');

}

} else {

alert('Invalid input. Please enter valid numbers.');

}

}

function multiplication() {

var num1 = parseFloat(prompt('Enter the first number for multiplication:'));

var num2 = parseFloat(prompt('Enter the second number for multiplication:'));

if (!isNaN(num1) && !isNaN(num2)) {

var result = num1 \* num2;

alert('Multiplication result: ' + result);

} else {

alert('Invalid input. Please enter valid numbers.');

}

}

var operation = prompt('Enter the operation you want to perform: \n1 - Addition \n2 - Subtraction \n3 - Division \n4 - Multiplication');

if (operation !== null) {

switch (operation) {

case '1':

addition();

break;

case '2':

subtraction();

break;

case '3':

division();

break;

case '4':

multiplication();

break;

default:

alert('Invalid operation choice.');

}

}

</script>

</body>

</html>

8)

<html>

<head>

<title>Year of Birth</title>

</head>

<body>

<script>

function getBirthYearFromNIC() {

var nicNumber = prompt('Enter the Student\'s NIC number:');

if (nicNumber !== null && nicNumber.length === 10) {

var yearDigits = nicNumber.substring(0, 2);

var birthYear = '19' + yearDigits; // Assuming the year format starts with '19' for NICs issued before 2000

20' + yearDigits : '19' + yearDigits;

alert('Year of Birth: ' + birthYear);

} else {

alert('Invalid NIC number. Please enter a valid 10-digit NIC number.');

}

}

getBirthYearFromNIC();

</script>

</body>

</html>