1.Description: This HTML program allows the user to enter three integers using input fields on the webpage. When the user clicks the "Compare" button, a JavaScript function processes the inputs to check if all numbers are equal or to find the largest number among them. The result is then displayed dynamically on the page inside a styled information message box. If all numbers are equal, the program shows the message "EQUALNUMBERS"; otherwise, it displays the largest number followed by the words "LARGER NUMBER."

Program:

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Larger Number Finder</title>

<script>

function findlargenumber() {

// Take three integers from user

let num1 = parseInt(prompt("Enter first integer:"));

let num2 = parseInt(prompt("Enter second integer:"));

let num3 = parseInt(prompt("Enter third integer:"));

let message = "";

// Check if all numbers are equal

if (num1 === num2 && num2 === num3) {

message = "EQUAL NUMBERS";

} else {

// Find the largest

let largest = Math.max(num1, num2, num3);

message = "LARGER NUMBER: " + largest;

}

// Display result in an info dialog

alert(message);

}

</script>

</head>

<body onload="findlargenumber()">

</body>

</html>

2.Description:

This program prompts the user to enter a number between 1 and 7 to represent the days of the week. Using a JavaScript switch statement, it matches the number to the corresponding weekday name. The result is displayed on the webpage below the input field. If the input number is outside the range, the program shows an error message prompting the user to enter a valid number.

Program:

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Week Days with Switch Case</title>

<script>

function showWeekDay() {

let dayNumber = parseInt(prompt("Enter a number (1-7) for the weekday:"));

let dayName = "";

switch(dayNumber) {

case 1:

dayName = "Sunday";

break;

case 2:

dayName = "Monday";

break;

case 3:

dayName = "Tuesday";

break;

case 4:

dayName = "Wednesday";

break;

case 5:

dayName = "Thursday";

break;

case 6:

dayName = "Friday";

break;

case 7:

dayName = "Saturday";

break;

default:

dayName = "Invalid input! Please enter a number between 1 to 7";

}

// Display result in dialog box

alert(dayName);

// Also display result inside webpage

document.getElementById("output").innerHTML = "<h2>" + dayName + "</h2>";

}

</script>

</head>

<body onload="showWeekDay()">

<div id="output" style="text-align:center; margin-top: 20px; font-family: Arial;"></div>

</body>

</html>

3.Description: This HTML program demonstrates how to print numbers from **1 to 10** using three different types of loops in JavaScript: **for**, **while**, and **do-while** loops. Each loop iterates through numbers 1 to 10 and displays them separately on the webpage for easy comparison.

* **For Loop:** Executes a block of code a fixed number of times using an index variable.
* **While Loop:** Repeats the block of code as long as a specified condition is true.
* **Do-While Loop:** Similar to the while loop but guarantees the block executes at least once before checking the condition.

Program:

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8" />

<title>Print 1 to 10 Using For, While and Do-While Loops</title>

<style>

body {

font-family: Arial, sans-serif;

text-align: center;

margin-top: 20px;

}

section {

margin-bottom: 20px;

}

h2 {

margin: 3px 0;

}

</style>

<script>

function printNumbers() {

// For Loop

let outputFor = "<h3>Using For Loop:</h3>";

for (let i = 1; i <= 10; i++) {

outputFor += "<h2>" + i + "</h2>";

}

document.getElementById("forOutput").innerHTML = outputFor;

// While Loop

let outputWhile = "<h3>Using While Loop:</h3>";

let numberWhile = 1;

while (numberWhile <= 10) {

outputWhile += "<h2>" + numberWhile + "</h2>";

numberWhile++;

}

document.getElementById("whileOutput").innerHTML = outputWhile;

// Do-While Loop

let outputDoWhile = "<h3>Using Do-While Loop:</h3>";

let numberDoWhile = 1;

do {

outputDoWhile += "<h2>" + numberDoWhile + "</h2>";

numberDoWhile++;

} while (numberDoWhile <= 10);

document.getElementById("doWhileOutput").innerHTML = outputDoWhile;

}

</script>

</head>

<body onload="printNumbers()">

<section id="forOutput"></section>

<section id="whileOutput"></section>

<section id="doWhileOutput"></section>

</body>

</html>

4. Description:

* **for-in:** Used to iterate over the keys of an object.
* **forEach:** Executes a function for each key–value pair using Object.entries().
* **for-of:** Iterates through key–value pairs from an iterable like Object.entries().

Program:

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Iterative Object in JavaScript</title>

<script>

function displayObjectData() {

const person = {

name: "sruthi",

age: 18,

city: "Kakinada"

};

let output = "";

// Using for-in (loops over keys)

output += "<h3>Using for-in loop:</h3>";

for (let key in person) {

output += key + ": " + person[key] + "<br>";

}

// Using forEach (on Object.entries)

output += "<h3>Using forEach loop:</h3>";

Object.entries(person).forEach(([key, value]) => {

output += key + ": " + value + "<br>";

});

// Using for-of (loops over entries)

output += "<h3>Using for-of loop:</h3>";

for (let [key, value] of Object.entries(person)) {

output += key + ": " + value + "<br>";

}

document.getElementById("result").innerHTML = output;

}

</script>

</head>

<body onload="displayObjectData()">

<h2 style="text-align:center;">Display Object Data Using Loops</h2>

<div id="result" style="margin:20px; font-family:Arial; font-size:16px;"></div>

</body>

</html>