Web Application Development
Practical 5: JavaScript: conditional statements, loops and arrays

The aim in this practical is to gain experience with JavaScript conditional statements, loops and arrays. You can embed the JavaScript code in your HTML pages, or use an external JavaScript file (.js file) that you link to.

Exercise 1:
Write a simple JavaScript program to join all elements of the following array into a string and display it.

var myColor = ["Red", "Green", "White", "Black"];

Exercise 2:
Write a JavaScript For loop that will iterate from 0 to 15. For each iteration, check if the current number is odd or even, and display a message to the screen.

Exercise 3:
Write a JavaScript function to calculate and display the sum the multiples of 3 and 5 under 1000.

Hint: the answer is 233168

Exercise 4:
Part 1:
Create a webpage that allows a person to enter two numbers in text fields. Write a JavaScript function that reads the two numbers and displays the larger.

Part 2:
Extend the solution to part 1 by adding error checking to the values entered by the user. E.g. check that numbers and not letters have been entered. If letters have been entered display an appropriate message.

Exercise 5:
Part 1:
Write the JavaScript code to display the elements of the following array in a webpage.

var a = [[1, 2, 1, 24], [8, 11, 9, 4], [7, 0, 7, 27], [7, 4, 28, 14], [3, 10, 26, 7]];

***Sample Output*:**
"Row 0 = 1 2 1 24"
" Row 1 = 8 11 9 4"

Part 2:
Write the JavaScript code to create a table and display the ‘var a’ as rows and columns in this table.

Exercise 6:
Part 1:
Write the JavaScript code to calculate the average marks of the following students.

Part 2:
Create a table that displays the marks and also the grade achieved by each student.

Student Name	Marks
David	80
Vinoth	77
Divya	88
Ishitha	95
Thomas	68

Range	Grade
<60	F
<70	D
<80	C
<90	B
<100	A