Computer Science Division
Department of Mathematics
Faculty of Science

Level 2- Spring Semester
Course Code: COMP 206
Date: February 27, 2024

AIN SHAMS UNIVERSITY

Sheet 1

Objective: upon successful completion of this sheet, students should be able to

- Use different output statements,
- Employ control statements,
- Create simple functions, and
- Handle the interaction between HTML and JavaScript.

(1) Write a JavaScript program to create a simple calculator. A user should input the values of the two operands using text fields. The program allows the following operators: addition, subtraction, multiplication, division, and remainder. After clicking the "calculate" button, the program should display the results of all operations in a tabular format. The header row should be distinguished from others using colors. If the second operand is zero, an error message should be shown next to the text field indicating that zero is not allowed.

(2) Write a JavaScript program that accepts input for a temperature in Celsius. The program also provides options, represented by checkboxes, to convert the temperature to Fahrenheit, Kelvin, or both. When the user clicks the "convert" button, the program should display the converted temperature(s) according to the user choice.

(3) Write a JavaScript program that creates a pizza ordering form, as shown in the provided figure. When the user clicks the "submit" button, the program should display the entered data in an alert message. If any of the required fields are left blank, the program should display an error message in red next to the respective control element.

(4) Write a JavaScript program to create a form for finding the factors of a number, as illustrated in the provided figures. If the number of factors is even, display the factors in a tabular format with a blue background. Otherwise, display them in a green background. Also, display a message in the console indicating the total number of factors.