Web Programming Lab

Assignment – 3

Objective: Javascript basics.

Q1. If–Else Statement: Write a JavaScript program that takes a number as input and checks:

- If the number is **positive**
- **Negative**
- Or **zero**

Display an appropriate message for each case.

Q2. Loops: Write a JavaScript program using a **for loop** to print the **multiplication table of a given number** (up to 10).

Example (for input 5):
$5 \times 1 = 5$
$5 \times 2 = 10$
…
$5 \times 10 = 50$

Q3. Loops + If–Else: Write a JavaScript program that prints all numbers from **1 to 50**:

- Print **"Fizz"** for multiples of 3
- Print **"Buzz"** for multiples of 5
- Print **"FizzBuzz"** for multiples of both 3 and 5
- Otherwise, print the number

Q4. Math Functions: Write a JavaScript program that:

- Takes two numbers as input
- Displays:
    - Square root of the first number
    - Power of first number raised to the second (Math.pow)
    - Maximum and minimum of the two numbers
    - Absolute difference between the numbers

Use JavaScript **Math functions**.

Q5. Functions: Create a JavaScript function named calculateArea() that:

- Accepts **length** and **breadth** as parameters
- Returns the **area of a rectangle**
- Call the function and display the result

Q6. Objects: Create a JavaScript object named student with the following properties:

- name
- rollNumber
- course
- marks

Add a method getResult() that:

- Calculates the percentage (out of 500)
- Displays whether the student has **Passed** ($\geq 40\%$) or **Failed**