Assignment 3

Subject: PPWJ (CSE 3838)
Session: Sep 2025 to Jan 2026
Branch: CSIT
Section: All
Course Outcomes: CO2

Learning Levels: Remembering (L1), Understanding (L2), Application (L3), and Analysis (L4)

Q No.	Questions	Learning Levels
Q1	A grocery store keeps track of item codes in its computer system. Currently, the list is stored in an array. The store manager wants you to: - Add a new item code at the end of the list - Remove the first item code from the list - Display the updated list of item codes after performing both operations.	L2, L3
Q2	A fruit vendor arranges the fruits on his stall in alphabetical order so that customers can find them easily. However, sometimes he prefers to display them in reverse order (for decoration purposes). You are given an array of fruit names. Your task is to: - Sort the fruits in alphabetical order. - Reverse the order and display the result again. - Print both arrangements to the console.	L3, L4
Q3	A teacher maintains an array of student roll numbers for her class. She wants to check: - The index position of a student with roll number 23. - Whether a student with roll number 100 exists in the list or not. Write a JavaScript program that uses appropriate array methods to solve both tasks and display the results.	L3

Q4	In a company's HR system, employee IDs are stored in an array. The HR manager wants to remove some employee IDs. However, there are two ways to remove data in JavaScript: - Using the delete keyword. - Using the splice() method. Your task is to: - Demonstrate the effect of using delete on an employee array. - Demonstrate the effect of using splice() on the same array. - Clearly show how the length of the array changes in both cases.	L3, L4
Q5	A simple Tic-Tac-Toe game board can be represented using a 3x3 two-dimensional array in JavaScript. The board contains numbers 1 to 9 in sequence. Your task is to: - Create a two-dimensional array to represent the board. - Write code to access and display the middle cell of the board (i.e., the center element).	L2, L3
Q6	A school maintains records of each student using objects. A student object contains: - name - age - marks (stored as an array of numbers) Your task is to: - Add a new mark to the student's marks array (representing the score in a new exam). - Find and print the highest mark obtained by the student.	L3, L4
Q7	An online bookstore keeps its catalog as an array of objects. Each object stores: - title of the book - author of the book Your task is to: - Create an array of at least three book objects. - Write a program that goes through the catalog and displays the titles of all available books.	L3
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