Programs to practice in the Lab

Topics Covered: Callback, Promise, and Async/Await

Question 1: Write a function greet that takes a name and a callback function. The function should return a greeting message by calling the callback with the message.

Question 2: Create three functions that take a number, multiply it by 2, subtract 3, and then add 10. Use callbacks to chain these operations together.

Question 3: Write a function delayedMessage(message, delay) that prints the message after the specified delay using setTimeout. Use a callback for when the message has been printed.

Question 4: Write a function fetchDataWithCallback that simulates fetching data from an API with a delay. Implement error handling in the callback, where the callback can receive either a successful response or an error message. Test the function by simulating both success and failure scenarios.

Question 5: In a payment processing system, you need to:

Authenticate the user, verify if the payment method is valid, Process the payment, Update the user's account balance, and notify the user of the payment result via email.
Design this payment processing system using callbacks to ensure each step happens in order?

Note: Create a proper GUI for the same to collect the valid input data from the user.

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