SE 1105 PROGRAMMING AND PROBLEM SOLVING I

Week 5

Task 1: Even and Odd Sum Calculator

Write a C program to calculate and display the sum of even and odd numbers within a given range.

Instructions:

- 1. Write a function called **calculateEvenOddSum** that takes two positive integers, A and B, as arguments and calculates the sum of even and odd numbers within the range [A, B] and prints them separately.
- 2. In the main function:
 - Prompt the user to enter two positive integers, A and B.
 - Call the **calculateEvenOddSum** function with the user's inputs as arguments.
 - Display the sum of even and odd numbers within the specified range.

Task 2: ATM Transaction Simulator

Create a program that simulates an ATM (Automated Teller Machine) transaction system. The program should allow users to perform various ATM transactions, including checking their balance, depositing money, and withdrawing money.

Instructions:

- 1. Implement a menu system that allows users to choose from the following options: (1) Check Balance, (2) Deposit, (3) Withdraw, and (4) Exit.
- 2. Initialize a user's balance to a starting amount (e.g., 1000).
- 3. Use a for loop to repeatedly display the menu and process the user's choice until the user selects "Exit."
- 4. If the user chooses "Check Balance," display their current balance.
- 5. If the user chooses "Deposit," ask the user for the amount they want to deposit and update their balance accordingly.
- 6. If the user chooses "Withdraw," ask the user for the amount they want to withdraw. Ensure that they have sufficient funds in their account before allowing the withdrawal and update their balance accordingly.
- 7. If the user enters an invalid input, ask the user to enter a new input until a valid input is provided.
- 8. After each transaction (Deposit or Withdraw), display the new balance.
- 9. When the user selects "Exit," display a farewell message.