Week 1: Basics of Programming and Simple Applications

Task 1: Basic Banking System

• **Objective:** Develop a basic banking system (on console) that allows users to manage their accounts through simple transactions like deposits, withdrawals, and balance inquiries.

• Requirements:

o Setting Up the System:

- Create a menu-driven interface that prompts the user to select between depositing money, withdrawing money, checking balance, or exiting the program.
- Implement a function to initialize a new account with a starting balance of zero.

Handling Deposits:

- Prompt the user for the amount to deposit.
- Validate the input to ensure it is a positive number.
- Update the account balance and display the new balance.

Handling Withdrawals:

- Prompt the user for the amount to withdraw.
- Validate the input to ensure the account has sufficient funds and the input is a positive number.
- Deduct the amount from the account balance and display the new balance.

Checking Balance:

Display the current account balance to the user.

Exiting the Program:

• Allow the user to exit the program using an appropriate menu option.

• Expected Outcome:

- A fully functional banking system where users can securely manage their money.
- All transactions should be followed by appropriate success or error messages to guide the user.