



## **GM UNIVERSITY**

(Established under the Karnataka State Act No. 19 of 2023)
Post Box No. 4, PB Road, Davanagere - 577006

### **Assignment-1**

Course Code	UE24CS1104
Course Title	Problem Solving through C Programming
Faculty Member	Keerthi Prasad G
Issue Date	13/11/2024
Submission Date	30/11/2024

### **Assignment Question 1:**

**Topic:** Basic Concepts of C Programming

**Objective:** Create a structured C program that simulates a basic bank management system.

The program should include:

- Use of algorithms and flowcharts to demonstrate the program's logic.
- Appropriate use of variables, constants, operators, expressions, and conditional statements to implement the bank management system.
- Efficient use of conditional statements to allow the addition, deletion, and updating.

Provide a step-by-step breakdown of your solution approach, clearly explaining each design decision and coding construct used to optimize the program's performance and readability.

#### **Requirements:**

#### 1. Analyze

- 1. Identify the primary functions required for a basic bank management system, such as creating an account, managing deposits and withdrawals, and viewing account information.
- 2. Break down the program's requirements to understand the data types, variables, and control structures needed to implement each function in the system.

#### 2. Evaluate

- 1. Consider which data structures and control mechanisms (loops, conditionals) would be most effective for organizing and managing account data.
- 2. Evaluate the simplicity and efficiency of the program flow, ensuring the system is user-friendly and easily navigable.

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#### 3. Create

- 1. Write a C program that includes fundamental banking operations such as creating an account, performing deposits and withdrawals, and viewing account balances.
- 2. Use appropriate algorithms and control structures (e.g., branching and looping statements) to enable smooth functionality and manage transactions effectively.
- 4. **Discuss** the design decisions you made while creating the program. Explain how you selected the data types, operators, and control structures, and justify the logic behind using specific programming constructs to optimize the performance and functionality of your banking management system.

Course Coordinator Program Coordinator Dean-Faculty Senior Dean-Faculty