

## **LAB 2**

### **Task: Design a Simple Bank Account Management System**

#### **Objective:**

Develop a basic bank account management system that allows users to manage different types of accounts and perform essential banking operations.

#### **Requirements:**

1. **Account Types:**
  - Implement three types of accounts:
    - **Savings Account**
    - **Checking Account**
2. **Account Operations:**
  - **Deposit:** Add funds to an account.
  - **Withdraw:** Remove funds from an account.
  - **Apply Interest:** Calculate and apply interest to applicable accounts.
  - **Transfer:** Transfer funds between accounts.
3. **OOP Concepts:**
  - Utilize the Object-Oriented Programming (OOP) concepts covered so far in the course. This includes:
    - **Classes and Objects:** Define classes for different account types.
    - **Inheritance:** Use inheritance to manage shared functionality between account types.
    - **Encapsulation:** Ensure that account details are protected and only accessible through methods.

#### **Implementation Guidelines:**

- Keep the design simple and focus on applying OOP principles effectively.

#### **Submission:**

- Package your code in a file named `[your_name]_lab2.py`.
- Ship your code on this [drive folder](#)

Happy Hacking :)