Lab 5:

5. Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings account and the other current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintain a minimum balance and if the balance falls below this level, a service charge is imposed. Create a class Account that stores customer name, account number and type of account. From this derive the classes Cur-acct and Sav-acct to make them more specific

to their requirements. Include the necessary methods in order to achieve the following tasks:

- a) Accept deposit from customer and update the balance.
- b) Display the balance.
- c) Compute and deposit interest
- d) Permit withdrawal and update the balance

Check for the minimum balance, impose penalty if necessary and update the balance.

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Output:

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D:\Java_Lab_Programs>javac Bank.java
D:\Java_Lab_Programs>java Bank
Enter customer name: Shasha
Enter account type (1 for Savings, 2 for Current): 1
Enter account number: SBI123456789
Enter initial deposit for Savings account: 6000
Bank Operations Menu:
1. Deposit
2. Withdraw

    Display Balance
    Compute Interest (Savings account only)
    Check and apply minimum balance penalty (Current account only)

Enter your choice: 4
Interest of 240.0 has been added to your account. New balance: 6240.0
Bank Operations Menu:
1. Deposit
2. Withdraw
3. Display Balance
4. Compute Interest (Savings account only)
5. Check and apply minimum balance penalty (Current account only)
6. Exit
Enter your choice: 3
Account balance: 6240.0
Bank Operations Menu:
1. Deposit
2. Withdraw
3. Display Balance
4. Compute Interest (Savings account only)
5. Check and apply minimum balance penalty (Current account only)
6. Exit
Enter your choice: 2
Enter withdrawal amount: 1000
Withdrawal successful! Current balance: 5240.0
Bank Operations Menu:

    Deposit
    Withdraw
    Display Balance

4. Compute Interest (Savings account only)
5. Check and apply minimum balance penalty (Current account only)
6. Exit
Enter your choice: 3
Account balance: 5240.0
Bank Operations Menu:
1. Deposit
2. Withdraw
3. Display Balance
4. Compute Interest (Savings account only)
5. Check and apply minimum balance penalty (Current account only)
6. Exit
 Enter your choice: 6
Exiting program.
D:\Java_Lab_Programs>
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