BankDemo[LAB-5] : 10/11/2025

PROGRAMM:

BankDemo.java > ...

```java
import java.util.Scanner;

class Account {
    String name;
    int accno;
    String type;
    double balance;

    Account(String n, int a, String t, double b) {
        name = n;
        accno = a;
        type = t;
        balance = b;
    }

    void deposit(double amount) {
        balance += amount;
        System.out.println("Amount deposited: " + amount);
    }

    void display() {
        System.out.println("Account Holder: " + name);
        System.out.println("Account Number: " + accno);
        System.out.println("Account Type: " + type);
        System.out.println("Balance: " + balance);
    }
}

class Sav_acct extends Account {
    Sav_acct(String n, int a, double b) {
        super(n, a, "Savings", b);
    }

    // Compute and add interest
    void interest() {
        double rate = 0.05; // 5% interest
        double interest = balance * rate;
        balance += interest;
        System.out.println("Interest added: " + interest);
    }
```

```
41
42      // Withdraw money
43      void withdraw(double amount) {
44          if (amount > balance) {
45              System.out.println("Insufficient balance!");
46          } else {
47              balance -= amount;
48              System.out.println("Amount withdrawn: " + amount);
49          }
50      }
51  }
52
53
54  // Current Account class
55  class Cur_acct extends Account {
56      final double min_balance = 1000;
57      final double service_charge = 100;
58
59      Cur_acct(String n, int a, double b) {
60          super(n, a, "Current", b);
61      }
62
63      // Withdraw money with penalty if needed
64      void withdraw(double amount) {
65          if (amount > balance) {
66              System.out.println("Insufficient balance!");
67          } else {
68              balance -= amount;
69              System.out.println("Amount withdrawn: " + amount);
70              checkBalance();
71          }
72      }
73
74      // Check and apply penalty
75      void checkBalance() {
76          if (balance < min_balance) {
77              balance -= service_charge;
78              System.out.println("Balance below minimum! Service charge applied: " + service_charge);
79          }
80      }
81  }
```

```java
// Main class
public class BankDemo {
    Run | Debug | Run main | Debug main
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        Sav_acct sav = new Sav_acct("Leela", 101, 5000);
        sav.display();
        sav.deposit(1000);
        sav.interest();
        sav.withdraw(2000);
        sav.display();

        System.out.println("\n------------------------\n");

        Cur_acct cur = new Cur_acct("Ravi", 102, 2000);
        cur.display();
        cur.withdraw(1500);
        cur.display();

        sc.close();
    }
}
```

Output:

```
PS C:\Users\student\Desktop\1WN24CS120> cd "c:\Users\student\Desktop\1WN24CS120\" ; if ($?) { javac BankDemo.java } ; if ($?) { java BankDemo }
Account Holder: Leela
Account Number: 101
Account Type: Savings
Balance: 5000.0
Amount deposited: 1000.0
Interest added: 300.0
Amount withdrawn: 2000.0
Account Holder: Leela
Account Number: 101
Account Type: Savings
Balance: 4300.0

------------------------

Account Holder: Ravi
Account Number: 102
Account Type: Current
Balance: 2000.0
Amount withdrawn: 1500.0
Balance below minimum! Service charge applied: 100.0
Account Holder: Ravi
Account Number: 102
Account Type: Current
Balance: 400.0
PS C:\Users\student\Desktop\1WN24CS120>
```