Program 5:

```
import java.util.Scanner;
class Account {
   String Customer_name;
   Long account_number;
   String type;
   void getd() {
      Scanner sx = new Scanner(System.in);
      System.out.print("Enter Customer name: ");
      Customer_name = sx.next();
      System.out.print("Enter Customer Account number: ");
      account_number = sx.nextLong();
      System.out.print("Enter Account type (Savings/Current): ");
      type = sx.next();
   }
}
class Sav_acct extends Account {
   double balance;
   double interestRate = 0.05; // Annual interest rate

   void getad() {
      super.getd();
   }
   void deposit() {
      Scanner sx = new Scanner(System.in);
      System.out.print("Enter Amount to deposit: ");
      double dep_amt = sx.nextDouble();
      balance += dep_amt;
      System.out.println("Your balance after depositing: " + balance);
```

```
    }

    void balance() {
        System.out.println("Your current balance: " + balance);
    }
    void compute_deposit_interest() {
        double interest = balance * interestRate;
        balance += interest;
        System.out.println("Interest added: " + interest);
        System.out.println("Your updated balance: " + balance);
    }
    void withdraw() {
        Scanner sx = new Scanner(System.in);
        System.out.print("Enter amount to withdraw: ");
        double wdrwl_amt = sx.nextDouble();
        if (wdrwl_amt > balance) {
            System.out.println("Insufficient balance!");
        } else {
            balance -= wdrwl_amt;
            System.out.println("Amount has been successfully withdrawn!");
            System.out.println("Your updated balance: " + balance);
        }
    }
}
class Curr_acct extends Account {
    double balance;
    final double minimumBalance = 500.0;
    final double penalty = 50.0;
```

```
    void getad() {
        super.getd();
    }
    void deposit() {
        Scanner sx = new Scanner(System.in);
        System.out.print("Enter Amount to deposit: ");
        double dep_amt = sx.nextDouble();
        balance += dep_amt;
        System.out.println("Your balance after depositing: " + balance);
    }
    void balance() {
        System.out.println("Your current balance: " + balance);
    }
    void withdraw() {
        Scanner sx = new Scanner(System.in);
        System.out.print("Enter amount to withdraw: ");
        double wdrwl_amt = sx.nextDouble();
        if (wdrwl_amt > balance) {
            System.out.println("Insufficient balance!");
        } else {
            balance -= wdrwl_amt;
            if (balance < minimumBalance) {
                System.out.println("Your balance is below the minimum. Penalty imposed!");
                balance -= penalty;
            }
            System.out.println("Your updated balance: " + balance);
        }
    }
}
```

```
class lab5 {
    public static void main(String args[]) {
        Scanner sx = new Scanner(System.in);
        Sav_acct sav = new Sav_acct();
        Curr_acct cur = new Curr_acct();
        while (true) {
            System.out.println("\nPress accordingly:");
            System.out.println("1. New Savings Account");
            System.out.println("2. New Current Account");
            System.out.println("3. Deposit");
            System.out.println("4. Check Balance");
            System.out.println("5. Withdraw");
            System.out.println("6. Calculate Interest (Savings only)");
            System.out.println("7. Exit");
            System.out.print("Enter your choice: ");
            int choice = sx.nextInt();
            switch (choice) {
                case 1:
                    sav.getad();
                    System.out.println("New Savings account has been created!");
                    break;
                case 2:
                    cur.getad();
                    System.out.println("New Current account has been created!");
                    break;
                case 3:
                    System.out.print("Deposit to (1: Savings, 2: Current): ");
                    int depChoice = sx.nextInt();
                    if (depChoice == 1) sav.deposit();
```

```
            else if (depChoice == 2) cur.deposit();
            else System.out.println("Invalid choice!");
            break;
        case 4:
            System.out.print("Check balance for (1: Savings, 2: Current): ");
            int balChoice = sx.nextInt();
            if (balChoice == 1) sav.balance();
            else if (balChoice == 2) cur.balance();
            else System.out.println("Invalid choice!");
            break;
        case 5:
            System.out.print("Withdraw from (1: Savings, 2: Current): ");
            int wdrChoice = sx.nextInt();
            if (wdrChoice == 1) sav.withdraw();
            else if (wdrChoice == 2) cur.withdraw();
            else System.out.println("Invalid choice!");
            break;
        case 6:
            sav.compute_deposit_interest();
            break;
        case 7:
            System.out.println("Exiting. Thank you!");
            return;
        default:
            System.out.println("Invalid choice. Please try again.");
      }
    }
}
```

O/P :

```
Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice: 1
Enter Customer name: uday
Enter Customer Account number: 7869574456
Enter Account type (Savings/Current): Savings
New Savings account has been created!

Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice: 3
Deposit to (1: Savings, 2: Current): 1
Enter Amount to deposit: 25
Your balance after depositing: 25.0
```

```
Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice: 5
Withdraw from (1: Savings, 2: Current): 1
Enter amount to withdraw: 26
Insufficient balance!
```

```
Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice: 6
Interest added: 1.25
Your updated balance: 26.25

Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice: 5
Withdraw from (1: Savings, 2: Current): 1
Enter amount to withdraw: 6
Amount has been successfully withdrawn!
Your updated balance: 20.25

Press accordingly:
1. New Savings Account
2. New Current Account
3. Deposit
4. Check Balance
5. Withdraw
6. Calculate Interest (Savings only)
7. Exit
Enter your choice:
```