```java
import java.util.Scanner;

abstract class Account {
  String customerName, accountNumber;
  double balance;

  Account(String customerName, String accountNumber, double initialBalance) {
    this.customerName = customerName;
    this.accountNumber = accountNumber;
    this.balance = initialBalance;
  }
    abstract void deposit(double amount);
    abstract void displayBalance();
    abstract void withdraw(double amount);
}

class SavAcct extends Account {
    double interestRate;
    SavAcct(String customerName, String accountNumber, double initialBalance, double interestRate) {
        super(customerName, accountNumber, initialBalance);
        this.interestRate = interestRate;
    }

    void deposit(double amount) {
        balance += amount;
    }
    void displayBalance() {
      System.out.println("Savings Balance: " + balance);
    }
    void withdraw(double amount) {
      if (amount <= balance) balance -= amount;
    }
    void computeAndDepositInterest() {
      balance += balance * interestRate / 100;
    }
}

class CurAcct extends Account {
    static final double MIN_BALANCE = 1000, SERVICE_CHARGE = 50;
    CurAcct(String customerName, String accountNumber, double initialBalance) {
      super(customerName, accountNumber, initialBalance);
    }
      void deposit(double amount) {
        balance += amount;
    }
     void displayBalance() {
       System.out.println("Current Balance: " + balance);
    }
     void withdraw(double amount) {
        if (amount <= balance) {
          balance -= amount;
```

```
    void displayBalance() {
      System.out.println("Current Balance: " + balance);
    }
    void withdraw(double amount) {
      if (amount <= balance) {
        balance -= amount;
        if (balance < MIN_BALANCE) balance -= SERVICE_CHARGE;
      }
    }
}

class Bank {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter account type (savings/current): ");
        String type = scanner.nextLine();

        System.out.println("Enter customer name: ");
        String name = scanner.nextLine();

        System.out.println("Enter account number: ");
        String number = scanner.nextLine();

        Account account;
        if (type.equals("savings")) {
            System.out.println("Initial balance and interest rate: ");
            account = new SavAcct(name, number, scanner.nextDouble(), scanner.nextDouble());
        } else {
            System.out.println("Initial balance: ");
            account = new CurAcct(name, number, scanner.nextDouble());
        }

        while (true) {
            System.out.println("\n1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit");
            int choice = scanner.nextInt();
            switch (choice) {
                case 1: account.deposit(scanner.nextDouble());
                break;
                case 2: account.displayBalance();
                break;
                case 3: account.withdraw(scanner.nextDouble());
                break;
                case 4: if (account instanceof SavAcct) ((SavAcct) account).computeAndDepositInterest();
                break;
                case 5:
                return;
            }
        }
    }
}
```

```
D:\24BECS409>javac Bank.java

D:\24BECS409>java Bank
Enter account type (savings/current):
saavings
Enter customer name:
srushti
Enter account number:
2837
Initial balance:
372

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
1
300

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
2
Current Balance: 672.0

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
1
200

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
2
Current Balance: 872.0

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
3
200

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
2
Current Balance: 622.0

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
4

1. Deposit 2. Display Balance 3. Withdraw 4. Interest 5. Exit
5

D:\24BECS409>
```

Lab - 5 creating a class Bank & more

```
import java.util.Scanner
abstract class Account{
  String customerName;
     accountNumber;
     double balance;

Account(String customerName,
    String accountNumber, double initialBalance){
      this.customerName = customerName;
      this.accountNumber = accountNumber;
      this.balance = initialBalance;
  }

  Abstract void deposit (double amount);
   abstract void displayBalance();
   abstract void withdraw (double amount);
}
class SavAcct extends Account{
   double interestRate;
    SavAcct (String customerName, String
  accountNumber, double intialBalance,
   double interestRate){
   Super (customerName, accountNumber,
       intialBalance);
    this.interestRate = interestRate;
}
void deposit (double amount){
   balance += amount;
}
```

```
void displayBalance(){
  System.out.println("Savings Balance:" +
      balance);
}
void withdraw(double ammount){
  if(amount <= balance)
    balance -= amount;
}
void ComputeAndDepositInterest(){
  balance += balance * interestRate / 100;
}
}
class corAcct Extends Account{
  static final double MIN_BALANCE = 1000,
      SERVICE_CHARGE = 50;
  CorAcct(String customerName, String
    accountNumber, double initialBalance){
    super(customerName, accountNumber, initialBalance);
  }
  void deposit(double ammount){
    balance += amount;
  }
  void displayBalance(){
    System.out.println("Current Balance:" +
        balance);
  }
  void withdraw(double amount){
    if(amount <= balance){
      balance -= amount;
      if(balance < MIN_BALANCE) balance -=
          SERVICE_CHARGE;
    }
  }
}
```

```
class Bank{
public static void main (String [] args){
  Scanner scanner = new Scanner (System.in);
  System.out.println ("Enter account type
     savings/current): ");
  String type = scanner.nextLine();
  System.out.println ("Enter costomer name:");
  String name = scanner.nextLine();
  System.out.println
  Account account;
   if (type.equals ("savings")) {
     System.out.println("Intial balance &
        Interest rate:");
  account = new SavAcct (name, number,
     scanner.nextDouble(), scanner.nextDouble());
  }
  else{
     System.out.println ("Intial balance:");
     account = new CurAcct(name, number,
        scanner.nextDouble());
  }
  while (true){
     System.out.println ("\n1. Deposit
     2. Display Balance 3. Withdraw
        4. Interest 5. Exit");
   int choice = scanner.nextInt();
   switch(choice){
   case 1: account.displayBalance(); deposit(scanner.next
      break;
   case 2: account.withdraw(scanner.nextDouble());
      break;
```

```
            case 1 : account.depositor(scanner.nextDouble());
                     break;
            case 2 : account.displayBalance();
                     break;
            case 3 : account.withdraw(scanner.
                                nextDouble());
                     break;
            case 4 : if(account instance of SavAcct)
                        ((SaveAcct) account).computeAndDeposit
                            Interest();
                     break;
            Case 5 :
                     return;
                }
            }
        }
```

output:

```
javac Bank.java
jav E  Enter account type (savings/current):
savings
Enter customer name : srusht:
Enter account number : 2837
intial Balance : 372

1. Deposit 2. Display balance 3. withdraw
4. Interest 5. Exit
1
300

1. Deposit 2. Display balance 3. withdraw 4. Interest 5. Exit
2
current Balance : 672.0
```

PAGE NO :
DATE :

1. Deposit 2. Display Balance 3. withdraw 4. Interest 5. Ex...
£3
@200
1. Deposit 2. Display Balance 3. withdraw 4. Interest 5. Ex...
2
100.0
1. Deposit 2. Display Balance 3. withdraw 4. Interest 5. Ex...
5