

Output :

Enter customer name : Shreyash

Enter account number : 2

Enter the type of account : savings

--- MENU ---

1. Deposit

2. Withdraw

3. Display Account Details

4. Exit

Enter your choice : 1

Enter deposit amount : 1000

Deposit Successful

~~Enter your choice :~~

Interest computed and deposited : 1000.500

Enter your choice : 2

Enter withdrawal amount : 500

Withdrawal Successful. Balance = 550.0

Enter your choice : 3

Customer name : Shreyash

Account number : 2

Type of Account : Savings

Balance : 550.0

```
switch (ch) {
```

```
case 1:
```

```
System.out.println("Enter deposit  
amount");
```

```
double depositAmt = sc.nextDouble();
```

```
userAccount.deposit(depositAmt);
```

```
break;
```

```
case 2:
```

```
System.out.println("Enter withdrawal  
amount");
```

```
double withdrawalAmt = sc.nextDouble();
```

```
userAccount.withdraw(withdrawAmt);
```

```
break;
```

```
case 3:
```

```
System.out.println("Customer name :");
```

```
userAccount.customerName;
```

```
System.out.println("Account number :");
```

```
userAccount.accountNumber;
```

```
System.out.println("Type of Account :");
```

```
userAccount.accountType;
```

```
System.out.println("Balance :");
```

```
userAccount.balance;
```

```
case 4:
```

```
System.out.println("Exiting prog");
```

```
sc.close();
```

```
System.out.println("Exiting prog");
```

```
}
```

```
}
```

```
}
```

```
}
```



```

public class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int ch;
        Account userAccount = null;
        System.out.println("Enter customer
        name: ");
        String customerName = sc.next();
        System.out.println("Enter account number:
        ");
        int int accountNumber = sc.nextInt();
        System.out.print("Enter the type of
        Account: ");
        String accountType = sc.next();
        if (accountType.equals("savings")) {
            userAccount = new SavAcct(
                customerName, accountNumber);
        }
        else if (accountType.equals("current")) {
            userAccount = new CurAcct(
                customerName, accountNumber);
        }
        else {
            System.out.println("Invalid account
            type");
            sc.close();
            System.exit(0);
        }
    }
}

```

```

while(true) {
    System.out.println("--- MENU ---\n
    1. Deposit\n 2. Withdrawal\n 3.
    Display Account Details\n 4. Exit");
    System.out.print("Enter your choice: ");
    ch = sc.nextInt();
}

```

```
class SavAcc extends Account {  
    double interestRate;  
    SavAcc(String customerName, int  
            accountNumber) {  
        super(customerName, accountNumber,  
                "savings")  
        this.interestRate = 0.05;  
    }
```

```
    @Override  
    void deposit(double amount) {  
        super.deposit(amount);  
        computeInterest();  
    }
```

```
    void computeInterest() {  
        double interest = balance * interestRate;  
        balance += interest;  
        System.out.println("Interest computed  
and deposited. Balance: " + balance);  
    }
```

```
    void withdraw(double amount) {  
        if (amount <= balance) {  
            balance -= amount;  
            System.out.println("Withdraw  
Successful. Balance = " + balance);  
        }
```

```
    else {
```

```
        System.out.println("Insufficient  
funds for withdrawal");  
    }
```

```
}
```



```

void displayBalance() {
    System.out.println("Account Balance: " +
        balance);
}

void withdraw(double amount) {}

class Current extends Account {
    double minBal;
    double serviceCharge;
    Current(String customerName, int accountNumber) {
        super(customerName, accountNumber,
            "Current");
        this.minBalance = 1000;
        this.serviceCharge = 50;
    }

    @Override
    void deposit(double amount) {
        super.deposit(amount);
        checkMinimumBalance();
    }

    @Override
    void displayBalance() {
        super.displayBalance();
        checkMinimumBalance();
    }

    private void checkMinimumBalance {
        if (balance < minBalance) {
            balance -= serviceCharge;
            System.out.println("Service
                charge imposed. Balance: " +
                    balance);
        }
    }
}

```

Date: _____ Page: _____

→ Develop a JAVA prog to create a class Bank that maintains 2 kind of Account for its customers, savings and current account. saving acc provides compound interest and withdraw facilities. The current account provides check book facility. Current acc holder should maintain minimum balance otherwise service charge imposed. class Account contains customer name, account number, type of account and classes derived are Cur-acc and Sav-acc.

```
import java.util.Scanner;
```

```
class Account {
```

```
    String customerName;
```

```
    int accountNumber;
```

```
    String accountType;
```

```
    double balance;
```

```
{    Account(String customerName, int account  
        Number, String accountType) {
```

```
        this.customerName = customerName;
```

```
        this.accountNumber = accountNumber;
```

```
        this.accountType = accountType;
```

```
        this.balance = 0;
```

```
    }
```

```
    void deposit(double amount) {
```

```
        balance += amount;
```

```
        System.out.println("Deposit successful");
```

```
    }
```