

WEEK 6/CAB PROGRAM 5

Bank.java

```
import java.util.*;
```

```
class Account
```

```
{
```

```
String cust-name;
```

```
int acc-num;
```

```
String acc-type;
```

```
double balance;
```

```
Scanner in = new Scanner(System.in);
```

```
Account ( String cust-name , int acc-num , String acc-type ,  
double balance )
```

```
{
```

```
this.cust-name = cust-name ;
```

```
this.acc-num = acc-num ;
```

```
this.acc-type = acc-type ;
```

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

```
}
```

```
void customers()
```

```
{
```

```
System.out.println ("The " + this.acc-type + " states to : ");
```

```
System.out.println ("Customer Name: " + this.cust-name );
```

```
System.out.println ("Account Number: " + this.acc-num );
```

```
System.out.println ("Account Type : " + this.acc-type );
```

```
}
```

```
void Balance_Status()
```

```
{
```

```
System.out.println ("Balance Amount : " + this.balance );
```

void deposit()

System.out.println("Enter deposit Amount : ");
double deposit = in.nextDouble();
balance += deposit;

}

3
class Savings extends Account

{
double withdraw,
double deposit;

int rate, time;

double bal, interest;

Savings (String cust-name, int acc-num, String acc-type, double balance)

{

super(cust-name, acc-num, acc-type, balance);

}

scanners in = new Scanner(System.in);

void compoundInterest()

{

System.out.println("IC I : ");

System.out.println("Rate : ");

rate = in.nextInt();

System.out.println("Time : ");

time = in.nextInt();

bal = balance * Math.pow((1 + (rate / 100)), time);

interest = bal - balance

System.out.println("IC I is : " + interest);

balance = bal;

Scanned New 3.0000000000000005

void withdraw()

{

System.out.println("Enter withdraw amount: ");

withdraw = in.nextDouble();

if (balance < withdraw)

{

System.out.println("Not enough balance. (exit condition).");

withdraw = 0.0;

}

else

balance -= withdraw

System.out.println("Amount withdrawn = " + withdraw);

3

Class Current extends Account

{

double withdraw;

double deposit;

double minBalance = 5000;

Scanner in = new Scanner (System.in);

Current (String custName, int accNum, String accType,
double balance)

{

super (custName, accNum, accType, balance);

3

void withdraw()

{

System.out.print("Withdraw amount: ");

withdraw = in.nextDouble();

if (balance < withdraw)

{

System.out.println("Not enough balance.");

(curr withdraw);

withdraw = 0.0;

{
bal

balance = withdraw

System.out.println ("Amount withdrawn = " + withdraw);

{
void minimumBalance();

{
if (balance < minBalance)

System.out.println ("as balance is less than
min balance (5000), service charge of 500
imposed.");

balance = balance - 500;

{

{
}

class bank

{

public static void main (String args[])

{

String custName;

int accNum;

int type;

double ~~balance~~ balance;

Scanner in = new Scanner (System.in);

System.out.println ("Customer name:");
custName = in.next();

System.out.println ("Acc No:");

accNum = in.nextInt();

System.out.println ("Acc type:");

System.out.println("1. Savings Acc");
System.out.println("2. Current Acc");
if (type == 1) {

System.out.println("Enter balance amount : ");

balance = in.nextInt();

Savings = new Savings(cust_name, acc_num, "Savings",
balance);

s.customers();

s.balance_Status();

s.deposit();

s.balance_Status();

s.withdraw();

s.balance_Status();

s.compound_Interest();

s.customers();

s.balance_Status();

else if (type == 2)

System.out.println("Enter balance amount : ");

balance = in.nextInt();

Current c = new Current(cust_name, acc_num, "Current",
balance);

c.customers();

c.balance_Status();

c.deposit();

c.balance_Status();

c.withdraw();

c.balance_Status();

c.minimum_Balance();

1. customer(),
2. balance-status()

else

System - out. problem ("Invalid choice")

3
O/P

Enters customers name

A

Enters acc no.

1

Account type

1. Savings Acc
2. current Acc

2

Enters balance amount : 1000

current status :

Customers name : A

Acc no : 1

Acc type : current

Balance : 1000.0

Enters deposit amount : 6000

Enters amount to be withdrawn : 4000

Amount withdraw : 4000.0

Balance Amount : 3000.0

Since balance amount is less than min balance (5000),

service charge of 500 imposed

The current status is:

Customers name : A

Acc no : 1

Acc type : current

Balance : 2500.0

