

Lab Program 5

```
import java util. Scanner  
import java lang. Math;  
class Account
```

```
{
```

```
String name, acc - type;
```

```
int acc - no;
```

```
double bal - dep;
```

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

```
void setd ()
```

```
{
```

```
System.out.println("Enter Your name " name = ss.next());
```

```
System.out.println("Enter Your account number");
```

```
acc - no = ss.next().nextInt();
```

```
System.out.println("Name: " + name);
```

```
System.out.println("Account Number: " + acc - no);
```

```
System.out.println("Current Balance is: " + bal);
```

```
}
```

```
void deposit () {
```

```
System.out.println("Name: " + name);
```

```
System.out.println("Account Number: " + acc - no);
```

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

```
System.out.println("Current Balance is: " + bal);
```

```
}
```

```
void withdraw () {
```

```
System.out.println("Enter the amount to be deposited:");
```

```
dep = ss.nextDouble();
```

```
bal + = dep;
```

```
System.out.println("Balance amount: " + bal);
```

```
}
```

```
{ bal - = amt;
```

```
System.out.println("Account balance after Withdrawal is: " + bal);
```

```
}
```

```
else
```

```
System.out.println("\n\nThe amount can't be withdrawn");
```

```
}
```

```
}  
class Sav - acc extends Account
```

```
{
```

```
void calc - interest ()
```

```
{
```

```

System.out.println("Enter name and rate of interest");
double t = ss.next Double ();
double r = ss.next Double ();
double CI = bal * math.pow (1 + r / 100, t);
System.out.println ("In Compound Interest is " + CI);
bal = CI;
System.out.println ("Balance amount : " + bal);
}
void withdraw ()
{
    double amt;
    System.out.println ("Enter amount to be withdrawn :");
    amt = ss.next Double ();
    if (bal > amt)
    {
        bal = amt;
    }
    System.out.println ("Account Balance after withdrawal is " + bal);
}
else
    System.out.println ("Insufficient amount to be withdrawn");
}
}

```

class Bank

```

{
    public static void main (String arg [])
    {
        Scanner ss = new Scanner (System.in);
        Account a1 = new Account ();
        a1.setd ();
        if (a1.acc_type == true)
        {
            Sav = acct s1 = new Sav-acct ();
            s1.name = a1.name; s1 acc no = a1.acno; s1 acc_type = a1.acc_type;
            s1.bal = a1.bal;
            System.out.println ("Enter your choice: /1. deposit /2. calculate interest /3. withdraw /4. display /5. Exit");
            int ch = ss.next Int ();
            switch (ch)
            {
                case 1: s1.deposit (); break;
                case 2: s1.calc.interest (); break;
                case 3: s1.withdrawal (); break;
                case 4: s1.display (); break;
                case 5: exit (0); break;
            }
            boolean an (String acc type)
            {
                if (acc_type == "Savings")
            }
        }
    }
}

```

```

        return true;
    else if (acc_type == "current")
        return false;
    else
        return true;
}

```

```

}
class cur_acc extends Account

```

```

{
    int penal();

```

```

    double min_pen;

```

```

    System.out.println("\nEnter minimum balance & penalty amount if not followed");
    min = ss.next Double(); pen = ss.next Double();

```

```

    else
        return 1;
}

```

```

void withdraw()

```

```

{
    double amt;

```

```

    System.out.println("Enter amount to be withdrawn: ");

```

```

    amt = ss.next Double(); int a = penal();

```

```

    if (a == 1)

```

```

    {
        if (bal >= amt)

```

```

        default: System.out.println("Invalid Input");
    }
}

```

```

}
}

```

```

//
cur_acc c1 = new cur_acc();

```

```

c1.name = a1.name; c1.acc_no = a1.acc_no;

```

```

c1.acc_type = a1.acc_type; c1.bal = a1.bal

```

```

System.out.println("\nEnter your choice: /n 1. Deposit /n 2. Penalty  
check /n 3. Withdraw /n 4. Display /n 5. Exit");

```

```

int ch = ss.next Int();

```

```

switch (ch)

```

```

{

```

```

    case 1: c1.deposit(); break;

```

```

    case 2: c2.penal(); break;

```

```

    case 3: c1.withdraw(); break;

```

```

    case 4: c1.disp(); break;

```

```

    case 5: exit(0) break;

```

```

    default: System.out.println("Invalid Input");
}
}

```


Output :-

Enter your account type:

- 1) Savings account
- 2) Current account

1.

Cheque facility not available

Enter customer name

hhhh

Enter hhhh's account number

555

Enter balance amount

60000

Customer Name: hhhh

Your account number: 555

Your account balance: 60000.00

press 1 to deposit

1

enter amount to be deposited

500

sub-interest

4

Enter no of times interest applied

3

Enter no of time period

4

Interest- amt: 68054.27200001

Balance amt without interest is 603000

Available balance after updating is 68054.272

press 1 to withdraw amount

Enter your account type:

Savings account

Current account

ATM Facility not available

Enter customer name

h

Enter hhhh's account number

Enter balance amount

00

Customer Name: hhhh

Enter account number: 555

Enter Account Balance: 60000.0

Press 1 to deposit

Enter amount to be deposited

Enter rate of interest

Enter number of times interest applied per time period

Enter number of time periods

Interest amount=68854.27200000001

Balance amount without interest is 60500.0

Available balance after updating is 68854.27200000001

Press 1 to withdraw amount