⑤ Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings account & the other current account. The savings account provides compound interest & withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holder should also maintain a min. balance & if the balance falls below this level, a service charge is imposed.

Create a class Account that stores customer name, account number & type of account. From this derive the classes Cur-acct & Sav-acct to make them more specific to their requirements. Include the necessary methods in order to achieve the following tasks:

a) Accept deposit from customer & update balance
b) Display the balance
c) compute & deposit interest
d) Permit withdrawal & update the balance
Check for the minimum balance, impose penalty if necessary & update the balance.

```java
import java.util.*;
import java.lang.*;
class Account
{
public String acc-name;
public String acc-no;
public int acc-type;
public double balance;
public void getdata(String name, double no, int type,
                                              double bal)
}
```

```java
        acc-name = name;
        acc-no = no; acc-type = type; balance = bal;
    }
}

class Savings extends Account {
    public void deposit (deposit amt) {
        balance = balance + amt;
        System.out.println (balance); }
    public void withdraw (doble amt) {
        balance = balance - amt;
        System.out.println (mit balance); }
    public void interest (int time, int no) {
        double int r = balance * (1 + 6/no);
        int x = Math.pow (int r, (time * no));
        System.out.println ("Interest is " + intr);
        balance = balance + intr;
        System.out.println ("New balance :");  }
    }

class Current extends Account {
    public void deposit (double amt) {
        balance = balance + amt;
        System.out.println (balance); }
    public void withdraw (double amt) {
        balance = balance - amt;
        S.O.P (balance);
        check (balance);
    }

    public void check (double amt)
    {
        if (amt < 10000) {
        balance = balance - 500;
        S.O.P ("Insufficient" + balance);
    } } }
```

```
Class Main {
public static void main (String args [J) {
Scanner sc = new scanner( system.in);
    int temp =1;
    while (temp ==1)
    {
    double amt =0;
    S.O.P( "Enter name ");
    SC. next();
    string name =SC. nextLine();
    S.O.P( "Enter acc-no");
    double no = sc. nextDouble();
    S.O.P("Enter acc-Type 0)n for savings
                   2.)n current);
    int type = sc.nextInt();
    else
    {
    S.O.P("Enter balance");
    amt =sc.nextDouble(); {
    while(type ==1 && amt<10000);
    if (type ==0)
    {
    Savings s = new savings();
    s.getdata (name,no,type,amt);
    S.O.P( "In 1. Deposite )n 2. Withdraw )n3 Interest");
    int temp3 = sc.nextInt();
    if (temp3== 1 ) {
    S.O.P( "Enter Amount);
    double amt1 = sc.nextDouble();
        s.deposit (amt1);
    }
```

```java
else if ( temp3 = 2) {
S.O.P("Enter Amt");
double amt1 = sc.nextDouble();
    s.withdraw(amt1);
}

else if (temp3 = 3) {
    S.O.P(" Enter time");
    int tp = sc.nextInt();
    S.O.P("Enter no of times");
    int nof = sc.nextInt();
    S.interest(tp, nof);
}}

else if (type ==1) {
Current c =new Current();
c.getdata(name, no, type, amt);
S.O.P("1.Deposit 2. Withdraw");
int temp3 = sc.nextInt();
if (temp3 ==1) {
S.O.P("Enter amount");
double amt1 = sc.nextDouble();
    c.deposit(amt1);
}

else if (temp3 = 2) {
    S.O.P("Enter amount");
    double amt1 = sc.nextDouble();
    c.withdraw(amt1);
}
}

S.O.P("To continue 1 else 0");
    temp = sc.nextInt();
}
}
}
```

```
Administrator: Command Prompt - java Main

Microsoft Windows [Version 6.3.9600]
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C:\Users\BMSCECSEIL74>cd C:\Program Files\Java\jdk1.8.0_231\bin

C:\Program Files\Java\jdk1.8.0_231\bin>javac bank.java

C:\Program Files\Java\jdk1.8.0_231\bin>java Main
Enter name
aditya
Enter acc_no
1234
Enter acc_type
0 for Savings
1 for Current
0
Enter balance
123

1.Deposit
0.Withdraw
3.Interest
1
Enter Amoumt
12
135.0
To continue 1 else 0
0

C:\Program Files\Java\jdk1.8.0_231\bin>java Main
Enter name
aditya
Enter acc_no
122
Enter acc_type
0 for Savings
1 for Current
1
Enter balance
1234
```