Date __/__/____

Program 5

Develop a JAVA program to create a class Bank that maintains two kinds of accounts called saving account & current account.

```
import java.util.Scanner;
import java.lang.math;
class account
{
   String name = new String();
   int accno;
   double bal;
   Scanner s = new Scanner(System.in);
   void set()
   {
      System.out.println("Enter customer details
                          (name, account no, balance)");
      name = s.next();
      accno = s.nextInt();
      bal = s.nextDouble();
   }
   void display()
   {
      System.out.println("Name = "+name+
                         "\n Account no = "+accno
                         +"\n Balance = "+bal);
   }
   account()
   {
   }
}
```

Date __/__/____

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```
class sav_acc extends account
{
  Scanner s = new Scanner (System.in);
  sav_acc()
  {
    System.out.println("Cheque facility not
                        available");
  }
  void deposit()
  {
    int ch;
    double amt;
    System.out.println("1 for deposit");
    ch=s.nextInt();
    if(ch==1)
    {
      System.out.println("Enter amount to
                          be deposited");
      amt=s.nextDouble();
      bal = bal+amt;
    }
    else
      System.out.println("Invalid input");
  }
  void input()
  {
    System.out.println("Enter rate of interest,
                        no. of times interest applied
                        number of time periods");
    double r = s.nextDouble();
    int n= s.nextInt();
    int t =s.nextInt();
    double x = bal * (1+r/n);
    double ci = bal * Math.pow(x, n*t);
    bal=bal+ci;
    System.out.println("Balance = "+bal);
  }
```

Page No.

```
void wdl()
{
  System.out.println("1 to withdraw amount");
  int ch=s.nextInt();
  if(ch==1)
  {
    System.out.println("Enter amount to be with
    double withdraw=s.nextDouble();
    bal=bal-withdraw;
    System.out.println("Balance="+bal);
  }
  else
  {
    System.out.println("Invalid input");
  }
}
class curacc extends account
{
  Scanner s=new Scanner(System.in);
  cur_acc()
  {
    System.out.println("Cheque faclity available");
  }
  void deposit()
  {
    int ch;
    double amt;
    System.out.println("1 for deposit");
    ch=s.nextInt();
    if(ch==1)
    {
      System.out.println("Enter amount to be dep
      amt=s.nextDouble();
      bal=bal+amt;
  }
```

```
        else
            System.out.println("Invalid input");
    }
    void wd2()
    {
        System.out.println("1 for withdrawal");
        int ch = s.nextInt()
        if (ch==1)
        {
            System.out.println("Enter amount to be
                                withdrawn");
            double withdraw = s.nextDouble();
            bal=bal-withdraw;
            System.out.println("Balance ="+bal);
        }
        else
            System.out.println("Invalid input");
    }
    if(bal<1000)
    {
        System.out.println("Running out of min.
                            balance\n Amount of ₹50
                            deducted");
        bal=bal-₹50;
        System.out.println("Balance "+bal);
    }
    }
}
public class bank
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        int ch;
```

Date ___/___/___

Saathi

```
System.out.println("Press 1 for savings and 2 for current");
ch=s.nextInt();
switch(ch)
{
    case 1: sav_acc s1=new sav_acc();
            s1.set();
            s1.display();
            s1.deposit();
            s1.input();
            s1.withdraw();
            break;
    case 2: cur_acc c1=new cur_ac();
            c1.set();
            c1.display();
            c1.deposit();
            c1.input();
            c1.withdraw();
            break;
    default: exit(0);
  }
 }
}
```

Output

```
Press
1. Savings account
2. Current account

1
Cheque facility not available
Enter customer name
Arinash
Enter account number
2468
```

Page No.

Date __/__/____

Saathi

Enter balance amount
40000
Customer name: Avinash
Account no: 2468
Account balance: 40000

Press 1 ~~for~~ deposit
1
Enter amount to be deposited
10000
Enter rate of interest
0.05
Enter number of times interest applied
2
Enter number of time periods
2
~~Balance~~ amount = ~~55190.6445~~
Available balance after updating = 105190.64
Press 1 to withdraw amount
1
Enter amount to be withdrawn
40000
Available balance: 65190.644

Press
1. Savings account
2. Current account

2
Cheque facility available
Enter customer name
Dinesh
Enter account number
2468

Date ___/___/_____

Saathi

Enter balance amount
1000
Customer name: Dinesh
Account number: 1468
Account balance: 1000
Press 1 to deposit
1
Enter amount to be deposited
2000
Press 1 to withdraw amount
1
Enter amount to be withdrawn
3500
Available balance = -500.0
You are running out of minimum balance
Amount of 50 to be deducted
Balance = -550

07/12/2022

```
Press
1. Savings account
2. Current account
2
Cheque Facility available
Enter customer name
DINESH
Enter account number
2468
Enter balance amount
1000
Customer Name:DINESH
Your account number:2468
Your Account Balance:1000.0
Press 1 to deposit
1
Enter amount to be deposited
2000
Press 1 to withdraw ammount
1
Enter the amount to be withdrawn
3500
Available Balance:-500.0
You are running out of minimum balance
Amount of rs 50 has been credited
Your Available Balance:-550.0

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```

```
Press
1. Savings account
2. Current account
 1
Cheque Facility not available
Enter customer name
AVINASH
Enter account number
2468
Enter balance amount
40000
Customer Name:AVINASH
Your account number:2468
Your Account Balance:40000.0
Press 1 to deposit
1
Enter amount to be deposited
10000
Enter rate of interest
0.05
Enter number of times interest applied per time period
2
Enter number of time periods
2
Interest amount=55190.64453124998
Balance amount without interest is50000.0
Available balance after updating is105190.64453124997
Press 1 to withdraw ammount
1
Enter the amount to be withdrawn
40000
Available Balance:65190.64453124997
```