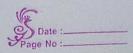
5. Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called a savings account and the other current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque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

Create a class Account that stores customer name, account number and type of account. From this derive the classes Cur-acct and 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 and update thebalance.
- b) Display the balance.
- c) Compute and deposit interest
- d) Permit withdrawal and update the balance

Check for the minimum balance, impose penalty if necessary and update the balance.

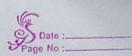
Complete the observation and execution of both the above programs tomorrow.



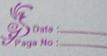
	import java util Scanner;
	import java. larg. * ;
	class Account
	of the area shortery toris out 32015
	String customer Name, acc Num;
	int type of Acci Cype and Inde
	double balance =0, dipo, withdraw
	roid acetype () \$
	Scanner SS=new Scanner (system.in);
	System-out println ("Choose the account type that
	you want to create In 1. Saving account In 2.
5.8	current account");
	type Of Ace = SS. next Int O;
	3
	void set ()
	- { 30820chatter bige
	Scanner SS = new Scanner (System in);
	System, out println ("Enter your name,
	account number");
	cutomer Name = SS. nextline();
	System out printh ("Enter the balance");
	balance = ss. Trent Double();
	System. out. Println ("The balance in the
	account is "+ balance);
	3 340
	void deposit ()
	E Cardelines
	Scanner sc=new Scanner (system.in);
	System. out println ("Enter the
	amount you want to diposit ");



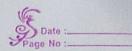
dipo = sc. nort Pouble (); balance + = dipo) class curacit entends Account { double min ba |- 1000 ; pen void Penalty () if (balance (minBal) balance = balance - (balance * 0.50); System out println (" A penalty is applied as your balance is less than the minimum balance"); roid withdraw1() [Scanner sc=new Scanner (System-in); System-out prindle (" Enter the amount in cheque that you want to withdraw"); withdraw = sc. nent Double (); if (withdraw (balance) { if ((balance - withdraw) < min Bal) System out printer ("A penalty will be imposed if you want to continue press! due press 2"); int c = sc. nextInt(); Ewitch(n) case 1: bolance = bonce blance - withdraw; Penaltly(); break's



	Page No:
-	casez: break;
	4
	3 of many hours & appropriate to any hours
4-1-1	elses
	balance = balance - withdraw's
	the 3 second of the allege has analyse
	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	else
	f System out print In ("Insufficient balance");
	3
	void display ()
	3
	System.out. printh ("the balance in the
	account is "+ balance);
	Science is a sound from the second
	class Sav-acct entends Account &
	void interest () {
	intt; Conguission 6
	Scanner SSS = new Scanner (System.in);
	System. out. println ("Enter the time in
	years");
	t=sss.nextInt();
	balance = balance + Math. pow ((1+ 5/100), t);
	24
	void withdrawll) {
	Scanner sss=nus scanner (system.in);
4.00	. System out printle ("Enter the amount
	you want to withdraw ");
	withdraw= SSS. nemt Double ();
	if (withdraw & balana) {
	balance = balance - withdraw; 9



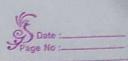
System out println ("Insufficient balance"))} void display () } System out println (" The bolance in the account is "+ balance); class Bonk public static void main (string args []) Scanner ss = new Scanner (system.in); int op; August a= new Account (); a acchipe (); if (a type of Acc= 1) Sat acit s= new Sav acet (); s. set(); while (true) System out println ("Enter the choia) In 1. Display In 2. Deposit In 3. Upadate your be interest in 4. withdraw 5. Exit I'j op = SS. nextInt(); switch (op)



	Page No:
	case 1: s. display();
	breaki
	case 2: 5-deposit ();
	break;
	case 3: s. interest ();
	break;
	case u: s-withdrawl ();
	break;
	case 5: System. enit (0);
NI COLUMN	3
	3.
	3 sop tall gid lumans site sends
	else if (a type of Ace=2)
	\$ seemante committee
1500	(ur-acet c= new aur-acet();
	C. Set ()
	while (true)
	\$
	System.out. pointln ("Enter the choice".
	In 1. display 12. diposit in 3. Withohaw
	In4. trit In's
-	op = ss. next Int ();
	switch (op)
	1. Outplay :
	case 1: cidisplay ()
	ison breaking stategers
	Case 2: (deposit ()
	break;
	Case 3: (withdraw ();
	break;
	case to system. ent(0);
-	



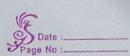
che s System out printin ("wrong chora") 3 Out put: Choose the account type that your want to create 1. Savings account 2. Current account
System.out printlin ("Wrong chora") 3 Out put: Choose the account type that your want to create 1. Savings account
System.out printlin ("Wrong chora") 3 Out put: Choose the account type that your want to create 1. Savings account
System.out printlin ("Wrong chora") 3 Out put: Choose the account type that your want to create 1. Savings account
out put: Choose the account type that your want to create 1. Savings account
out put: Choose the account type that your want to create 1. Savings account
out put: Choose the account type that your want to create 1. Savings account
Out put: Choose the account type that your wont to create 1. Savings account
Choose the account type that your want to create 1. Savings account
Choose the account type that your want to create 1. Savings account
1. Savings account
1. Savings account
1. Savings account
2. Current account
Enter your name, account number
Asha
abcd 1234
Enter the balance
50000
The balance in the account is 500000
Enter the choice
1. Display
2. Deposit
3. Update your interest
4. Withdraw
5. Exit
2 Charlestonics of the
Enter the amount you want
to deposit
1009



	Page No:
Enter the choice;	Constitution of the Consti
1. Display	695-7
2- Diposit	
3. Wit Update your	interest
4. Withdraw	
5- East at	many with orange and the
	MAND OF ENDIN
Enter the amount	you want to withdraw
	Convert to
enter the choice:	2
1- Display	500 000 000 000 000
	squa
3. Update your w	derest
4. Withdraw	eded to be egged
s- Enit	1018
3 3 4 4 10 10 14 14	at washed of the
Enter the time in	years.
1	year cold a good a selection
Enter the choice	10,10
1. Display	Carried Land
2. Deposit	163.0
3. update your in	
u. withdraw	
S. Exit	and the same of the same of the
1	03/25
The bolonu in -	the august is 43,050.0
The state of the s	the lander ways
Enter the choice	3/10/19
1- Display	
2. Deposit	
3. update your into	et



	Page No:	
	4. Withdraw	1
	S'-Exit	\
	5.	_
	The second secon	/
	the state of the s	\
	choose the account type that you	\
	want to create	
the state of	1. Saings account	
	2. Current account	
	9 Vigodo est cores	
	Enter your name, account number	
	Despa	
	1234 afds	
	Enter the balance	
	3000	
	The balance in the account is 3000-0	
	Enter the choice	
	1. Dep Display	
	2-deposit sommer man	
	3- Withdraw	
	4. Exit	1
	3 torrow man probable	
	Enter the amount in the cheque	
	that you want to with draw	
	2500 2500	
100 8	A penalty will be imposed If	
	you want to continue press I doe	
	pres 2	
	bolana i	
	Hingsol. S. Selles	100
	Since Section Comp Unback 2	-



	o rage no.
	A penalty is applied as you balance is
	less than minimum balance.
	Enter the choice
	1 - Display
	2. deposit
	3- withdraw
	4. Guit
	1,
	the balance in the account is 250.
	Enter the choice
	1. Display
	2. deposit
	3. withdraw
	4. Exit
	1. Not
13	

Output:

```
Command Prompt
                                                                                                                       П
                                                                                                                              X
Microsoft Windows [Version 10.0.19045.2251]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Hp>E:
E:\>cd E:\Desktop\Java Programming
E:\Desktop\Java Programming>javac Bank.java
E:\Desktop\Java Programming>java Bank
Choose the account type that you want to create
1.savings account
2.current account
Enter your name, account number
Asha
abcd1234
Enter the balance
50000
The balance in the account is 50000.0
Enter the choice:
1.Display
2.Deposit
3.Update your Interest
4. Withdraw
5. Exit
Enter the amount you want to deposit
1000
 Command Prompt
                                                                                                                        П
                                                                                                                               X
Enter the amount you want to deposit
```

```
1000
Enter the choice:
1.Display
2.Deposit
3.Update your Interest
4. Withdraw
5. Exit
Enter the amount you want to withdraw
10000
Enter the choice:
1.Display
2.Deposit
3.Update your Interest
4. Withdraw
5. Exit
Enter the time in years
Enter the choice:
1.Display
2.Deposit
3.Update your Interest
4. Withdraw
5. Exit
The balance in the account is 41000.0
Enter the choice:
```

```
Command Prompt
                                                                                                                     \times
The balance in the account is 41000.0
Enter the choice:
1.Display
2.Deposit
3.Update your Interest
4. Withdraw
 5. Exit
E:\Desktop\Java Programming>java Bank
Choose the account type that you want to create
1.savings account
2.current account
Enter your name, account number
Deepa
1234afds
Enter the balance
3000
The balance in the account is 3000.0
Enter the choice:
1. display
2. deposit
3. Withdraw
4. exit
Enter the amount in the cheque that you want to withdraw
 Command Prompt
                                                                                                                        Enter the amount in the cheque that you want to withdraw
2500
A penalty will be imposed if you want to cotinue press 1 else press 2
A penalty is applied as your balance is less than the minimum balance
Enter the choice:
1. display
2. deposit
3. Withdraw
4. exit
The balance in the account is 250.0
Enter the choice:
1. display
deposit
 3. Withdraw
4. exit
Enter the amount you want to deposit
1000
Enter the choice:
1. display
deposit
3. Withdraw
4. exit
The balance in the account is 1250.0
```

Enter the choice: 1. display

