QUESTION:

Develop

a Java program to create a class Bank that maintains two kinds of account for its customers, one called 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 the balance.
- 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.



| 19 | |
|---------|---|
| 5 | · Develop a java boragum to consta a class |
| | Banks that maintains two lands of account |
| | fast the customers one called savings account |
| | and the other cuspiens account the savings |
| | Ciccount perovines compound invested and withdravel |
| | facilities but no Chance book facility. The |
| | cuscion circoun perovides choque boxe facility |
| | but no inscree cuocioni account holders |
| | Should a 100 manual a minimum palance |
| | and if the balance falls below this level, |
| | a source througe is imposed. |
| | a configuration |
| | Covade a class Acceptal that Stores austrances |
| | masmo, account number and type of account. |
| | Forom this decine the chases cours and |
| | Sav- aca to make them more specific to |
| | there secure coments. Include the necessary methods |
| | im optoles to acheme the following tasias: |
| | the state of the secretary sessions |
| | a) Acorpi deposis ferom customers and update |
| | the balance. |
| | |
| | 6) Display the balance. |
| | |
| | cs compute and deposit interior. |
| | The world series |
| | do Poumo withdown and update the balance. |
| | The control of the same of |
| | crock foor the animimum balance, impose penalty, of |
| | |
| 1 | meressassy and update we balance |
| / | Computer the obscorne |
| | Compute the obscerve |
| | |
| 14 11 1 | |
| | |

| | cla- | SMAte |
|----|-------|-------|
| 5 | -114 | SMAL |
| | Date | 1.06 |
| 1 | Page | - |
| 11 | - uge | 1 |
| , | | |

| | Page |
|---|--|
| new distriction | Ampost jana uti. Scannos: |
| 158(45A) | |
| | class Accoum) |
| | 8 |
| and the second section of the second | Stering manne: |
| Andrew State Co. State Co. | my lype: |
| | long acono; |
| | double palame; |
| | void celf() |
| and the second | Cold Gerre |
| | Scammer S = new Scammer (System |
| | Syctem. Out parm (66 emsest customes m |
| | name = s. next Lime(); |
| | System our parms (contrar ciclons or |
| | |
| | SAZOW ON . bond (eventer paning); |
| | Same balled ; |
| | bulanco zs. nexi Daubo(): |
| | y |
| | C) woldsplay () |
| 3.00 | <u> </u> |
| | Systom. Out. paring my ((Customer ramo y:"- |
| | if Clype = =1) { |
| | System, our portmoth (" customer and |
| | type is: Savinge"); |
| | 0180 E |
| | System. coul, perind on (so customes acce |
| | 14pe & : (110000111): 3 |
| | System. Out portanion (so customer as |
| | num bear is 1/4 acomo)? |
| | Syssem. cour pougasion (co cuerocons balo |
| | :" + balance 23 3 |
| | · Trailing 25 |
| | void deposis () |
| | The state of the s |
| | Sys 20m. Out posim) (FED) of the of |



| | And the second s |
|-------------------|--|
| | Stammen & e new Stammen (Syclem, pm)? |
| Contraction where | double som) = x, mexipoublec); |
| | Paranco + samt; |
| | 3 |
| | |
| | class sav-acot extends Account |
| | 2 |
| | double impers: |
| | Sanna, 5 = new Sammar (Syrtom m); |
| | Savaco () (|
| 141 | type=1: y |
| | void (impored C) |
| | 4 |
| | ing timey: |
| | flocit istate; |
| | System out polinity (secompound Interes) |
| | details: 4) |
| | System our permits (60 protest those I'm years:1) |
| | +100003 = S. avors Int(); |
| | Sychem Our-boumin (ceemtor state of purson; "). |
| | islase = S-most Plags (); |
| | System. con - bonut ha (ce juhoros min pe |
| Les | compounded 5 times a year"); |
| | impercon: balance & (Math. poco (C(+1910199)) |
| | (5 × Homeys); |
| | palanco + = lungacos |
| | J |
| | void wisharawa |
| | |
| | Sy som. out- personally (co enter the amount |
| | to be withdrawen = "); |
| | double amy = 5. mesu boublo(); |
| | if C balana samt) |
| | 5 balance -= am; j |
| | |

| | Classmate Date Page |
|-------------|---|
| | else |
| 1 | 2 System. Out. perintin (66 Amount to be withdraw |
| | geroases them balance !!! "); }e |
| 7 | 3 |
| | F |
| | |
| | dass Guson-acch extends Account |
| | chouble charge combi |
| | 2012 act () 2 |
| | typez2; |
| | 3 |
| | void cheque () |
| | \$ |
| | System all payons (in Dayon the chance |
| | amount: "); |
| <u> </u> | Sannos 52 new Sannes (Syrtem in |
| | Checky-own, = S-meal Double (); |
| | if C check-ams > balang-5000) |
| | ξ |
| | System. Out. portmato ("Rs. 500 |
| - | penalty amposed Is it Oby to |
| | peroceed? France y faci yes and |
| | m fact mon); |
| | Slowing (option, eauaisc ('y")) |
| | 5 balanco = balconco - che da-amis |
| | erse & system. out-parimen (com |
| | Checia debited "Jiz, |
| | |
| | else |
| | \$ |
| | System. Oll. pournith (16 Rupees) |
| | t check-coms + (c defitedis) |
| 1 | balance = chock-amt; 3. |

| | AND MITHURESTON O |
|----|--|
| | \$ |
| | pe mythderands: 1,); Show and between the consonny to |
| | Scamper 2 = new Scenmon (Systermin); |
| | 6186 1. (min = - aung 2 (runo 7 andro 2 anus) . J. |
| | Seasyer general ("i"); I. General Actions of the management of the |
| | class Bornis & |
| | Public Static void ornown (String sr(J)); |
| j* | Scowner S = now Scowner (System In) |
| M | Syctem Out perimeter (" J. Sanings or |
| | 2. avoran ? ")- |
| | [m+ q') |
| | g = SmoxJDn)(); |
| | if (0 = =1) { |
| | San-acct St = ver san-acct (6); |
| | System. Out, pering (10 person the choice |
| | in 1, Set the values foot sowings are in 2. |
| | display in 3. deposition u. souseocost for s. Withdown in |
| | 6. exi3/w"); |
| | Opt = s, meat (); |
| | Sw Ich (CPI) |
| | 6 |
| | CUSE "111: SJ, SOFA(): |
| | becalle; |
| | case (12"; St. displays); beauty; |
| | COSE "3": St. deposit (): 600014; |
| | |

classmate

| | Date |
|----------|--|
| | Page |
| | |
| | case "HII : SI (WHOCODIC); paroaid; |
| | age (151) = 51. Withdraw(); boward? |
| | case "6" : System. ex11(0) |
| | 9- |
| | . 3 |
| | 4 |
| | 6126 & (0==5){ |
| | (400)-act (1 = new (400)-ace+()) |
| 1 | While (Jeans) S |
| | System our person (co entrey the choice: |
| | m 1. Set the value foor cuociani accounting. |
| | deplay on 3. depails my teranofes (meas m 3. |
| | Wishagawin 6 epristini); |
| | OP2 = S. meatrod(): |
| | Switch cop2) |
| 1 6.20 | 5 |
| L de | (ace): (1.26AB(); |
| 4 | Paould; |
| 4 | (ase 2: (1. display()) become: |
| | Cores 3: (1 · 90 bo2/3 ():p aroard. |
| | case 4: (1. (heave (); belease; |
| - | case s: (1. wandarawo) : baroarq |
| <u> </u> | COSE 6: System, POIL (O) 3 33 |
| | 33 |
| - | } |
| - | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| | Page |
|---|-------|
| 0. | |
| TI Sawings USI 2. Cusocani? | |
| To see the choice: | |
| I see the values for sowings ar | |
| J. Goboni | |
| 6. EXI). | |
| 1 | |
| Enter customer name: commulations to banks ballance: 777777 | |
| 3 tempor the amount to be departed: | 12000 |
| Euro Eu Acons;) | |
| Ensor sicile of invocusi: 7 | |
| 2 austonia was is constru | |
| Cretoures account the 12; Earlings | |
| auroromi balasmo is: 6.36767 | |
| British the amount to be withdeans | m: 17 |
| 6. | |
| | |

| 1) Savings OS1 2. CLOCOON ? |
|--|
| 2. |
| Enter the choice: |
| J see the values for account account |
| 2 dispicy |
| 3. depay |
| U. Laransfarchock |
| S. WHICKOW |
| 6 - (201) . |
| и. |
| |
| Re. 500 penalty imposed Is It org to percure |
| Emiter y feer yer and on feer mo |
| 9 |
| |
| 2. |
| Customer mame is comptime |
| Customer account type is account |
| Custerner account number 1239 |
| CCG(II) |
| 3. |
| tonter the amount to be deponted: 12345678 |
| |
| 5. |
| Ensey the compount to be withdown? |
| Balance = 2345678. |
| 6. |

OUTPUT:

```
C:\Users\amshu\OneDrive\Desktop\Downloads\OOJ-1BM21cs019--main (2)\OOJ-1BM21cs019--main>java Bank
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1a
Enter customer name: amshu
Enter type of account: current
Enter account number: 12
Enter bank balance: 12000
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. minBalance
2e. Withdraw
2f. exit
2c
Enter the amount to be deposited: 12000
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1a
Enter customer name: amshu
Enter type of account: savings
Enter account number: 123
Enter bank balance: 12899
Enter the choice:
2a.Set the values for current account
2b. display
```

```
Enter customer name: amshu
Enter type of account: savings
Enter account number: 123
Enter bank balance: 12899
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. minBalance
2e. Withdraw
2f. exit
2b
Customer name is: null
Customer account type is: null
Customer account number is: 0
Current balance is: 12000.0
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1b
Customer name is: amshu
Customer account type is: savings
Customer account number is: 123
Current balance is: 12899.0
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. minBalance
2e. Withdraw
2f. exit
2d
No penalty imposed
Enter the choice:
1a.Set the values for savings acc
1b. display
```

```
2b. display
2c. deposit
2d. minBalance
2e. Withdraw
2f. exit
2d
No penalty imposed
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1f
```