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ROLL NO : 180101066

INSTRUCTIONS FOR EXECUTION:

- 1) Open the terminal in “180101066” directory provided in .zip folder.
- 2) Run
 - a) `javac MyGNB.java`
 - b) `java MyGNB`

Screenshot of a short execution.

```
PS C:\Users\RITIK MANDLOI\Desktop\BANK> cd 'c:\Users\RITIK MANDLOI\Desktop\BANK'; & 'c:\Users\RITIK MANDLOI\.vscode\extensions\vscjava.vscod
doptOpenJDK\jdk-11.0.10-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=localhost:65163' '-Dfile.encoding=UTF
r\workspaceStorage\dd0440a30039e18c45f45717d5fd4022\redhat.java\jdt_ws\BANK_5376f4e2\bin' 'MyGNB'
Initialization Of Linked List Array
Branch 0: [acc=0017360160, bal=2299038],[acc=0418721182, bal=2503940],[acc=0360563445, bal=1384129],[acc=0118866157, bal=203221],
Branch 1: [acc=1180141831, bal=5531878],[acc=1886676015, bal=7324026],[acc=1477350241, bal=1558961],[acc=1311617608, bal=5020479],
Branch 2: [acc=2576323327, bal=8587827],[acc=2372340765, bal=9956186],[acc=2610634875, bal=3435152],[acc=2115065373, bal=4466735],
Branch 3: [acc=3231366703, bal=6518290],[acc=3443401318, bal=7479438],[acc=3433085725, bal=2797966],[acc=3086442806, bal=4440395],
Branch 4: [acc=4134210401, bal=5298899],[acc=4047168248, bal=7064002],[acc=4423741724, bal=5565437],[acc=4058517620, bal=4263563],
Branch 5: [acc=5515165826, bal=3816706],[acc=5606462060, bal=9902376],[acc=5810245204, bal=2061438],[acc=5545570536, bal=8930471],
Branch 6: [acc=6611185887, bal=1639133],[acc=6042464138, bal=3513832],[acc=6385114251, bal=5869115],[acc=6805442625, bal=446223],
Branch 7: [acc=7566070172, bal=2157578],[acc=7076211687, bal=3398781],[acc=7806566075, bal=2137137],[acc=7066572160, bal=2507735],
Branch 8: [acc=8773414570, bal=4458116],[acc=8341673581, bal=8702872],[acc=8313304881, bal=1623728],[acc=8164728675, bal=2557860],
Branch 9: [acc=9416132080, bal=8843637],[acc=9511671105, bal=5542142],[acc=9372865526, bal=995922],[acc=9206148131, bal=5326474],

Testing ::
0: Money_Transfer 5810245204 1477350241 317099
1: Cash_Deposit 7076211687 2377514
2: Money_Transfer 4058517620 8773414570 6938883
3: Cash-Withdrawal 3231366703 5948580
4: Cash-Withdrawal 1311617608 1532203
5: Cash_Deposit 8313304881 2890757
6: Money_Transfer 7066572160 8341673581 1486632
7: Money_Transfer 8164728675 3231366703 15946
8: Money_Transfer 5606462060 7076211687 1728338
9: Cash-Withdrawal 6042464138 1933609
Testing Completed

Final Status Of all accounts
Branch 0: [acc=0017360160, bal=2299038],[acc=0418721182, bal=2503940],[acc=0360563445, bal=1384129],[acc=0118866157, bal=203221],
Branch 1: [acc=1180141831, bal=5531878],[acc=1886676015, bal=7324026],[acc=1477350241, bal=1876060],[acc=1311617608, bal=3488276],
Branch 2: [acc=2576323327, bal=8587827],[acc=2372340765, bal=9956186],[acc=2610634875, bal=3435152],[acc=2115065373, bal=4466735],
Branch 3: [acc=3231366703, bal=585656],[acc=3443401318, bal=7479438],[acc=3433085725, bal=2797966],[acc=3086442806, bal=4440395],
Branch 4: [acc=4134210401, bal=5298899],[acc=4047168248, bal=7064002],[acc=4423741724, bal=5565437],[acc=4058517620, bal=4263563],
Branch 5: [acc=5515165826, bal=3816706],[acc=5606462060, bal=8174038],[acc=5810245204, bal=1744339],[acc=5545570536, bal=8930471],
Branch 6: [acc=6611185887, bal=1639133],[acc=6042464138, bal=1580223],[acc=6385114251, bal=5869115],[acc=6805442625, bal=446223],
Branch 7: [acc=7566070172, bal=2157578],[acc=7076211687, bal=7504633],[acc=7806566075, bal=2137137],[acc=7066572160, bal=1021103],
Branch 8: [acc=8773414570, bal=4458116],[acc=8341673581, bal=10189504],[acc=8313304881, bal=4514485],[acc=8164728675, bal=2541914],
Branch 9: [acc=9416132080, bal=8843637],[acc=9511671105, bal=5542142],[acc=9372865526, bal=995922],[acc=9206148131, bal=5326474],

Execution time :56.0 ms
PS C:\Users\RITIK MANDLOI\Desktop\BANK> |
```

At first there is Initial LinkedList Accounts are printed
Then The transactions have been printed
After testing, Final LinkedList Accounts are printed

*****You need to uncomment some code in Testing() and main() function to print this output preferably for a small input.
You can adjust variable nUsers, nTransactions according to yourself in main() function*****

Screenshot of execution of 10^6 transactions total

Execution Time: 12.171 s

```
doptOpenJDK\jdk-11.0.10.9-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,add
r\workspaceStorage\dd0440a30039e18c45f45717d5fd4022\redhat.java\jdt_ws\BANK_5376f4e2\bin' 'MyGNB'
Initialized Linked List Array

Testing ::

Testing Completed

Execution time :12171.0 ms
PS C:\Users\RITIK MANDLOI\Desktop\BANK> █
```

Screenshot of execution of 10^7 transactions total

Execution Time: 430.709 s

```
PS C:\Users\RITIK MANDLOI\Desktop\BANK> c:; cd 'c:\Users\RITIK MANDLOI\Desktop\BANK'; & 'c:\Users
doptOpenJDK\jdk-11.0.10.9-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,add
r\workspaceStorage\dd0440a30039e18c45f45717d5fd4022\redhat.java\jdt_ws\BANK_5376f4e2\bin' 'MyGNB'
Initialized Linked List Array

Testing ::

Testing Completed

Execution time :430709.0 ms
█
```