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## Work on project. Stage 4/4: Advanced system

Project: [Simple Banking System](#)

Hard 31 minutes

272 users solved this problem. Latest completion was about 7 hours ago.

### Description

You have created the foundation of our banking system. Now let's take the opportunity to deposit money into an account, make transfers and close an account if necessary.

Now your menu should look like this:

```
1 1. Balance
2 2. Add income
3 3. Do transfer
4 4. Close account
5 5. Log out
6 0. Exit
```

2 / 2 Prerequisites

- ✓ Results ordering Stage 4
- ✓ Basic DELETE statement Stage 4

If the user asks for `Balance`, you should read the balance of the account from the database and output it into the console.

`Add income` item should allow us to deposit money to the account.

`Do transfer` item should allow transferring money to another account. You should handle the following errors:

- If the user tries to transfer more money than he/she has, output: "Not enough money!"
- If the user tries to transfer money to the same account, output the following message: "You can't transfer money to the same account!"
- If the receiver's card number doesn't pass the Luhn algorithm, you should output: "Probably you made mistake in the card number. Please try again!"
- If the receiver's card number doesn't exist, you should output: "Such a card does not exist."
- If there is no error, ask the user how much money they want to transfer and make the transaction.

If the user chooses the `Close an account` item, you should delete that account from the database.

### Examples

The symbol `>` represents the user input. Notice that it's not a part of the input.

Example 1:

```
1 1. Create an account
2 2. Log into account
3 0. Exit
4 >1
5
6 Your card have been created
7 Your card number:
8 4000009455296122
9 Your card PIN:
10 1961
11
12 1. Create an account
13 2. Log into account
14 0. Exit
15 >1
16
17 Your card have been created
18 Your card number:
19 4000003305160034
20 Your card PIN:
21 5639
22
23 1. Create an account
24 2. Log into account
25 0. Exit
26 >2
27
28 Enter your card number:
29 >4000009455296122
30 Enter your PIN:
31 >1961
32
33 You have successfully logged in!
34
35 1. Balance
36 2. Add income
37 3. Do transfer
38 4. Close account
39 5. Log out
40 0. Exit
41 >2
42
43 Enter income:
44 >10000
45 Income was added!
46
47 1. Balance
48 2. Add income
49 3. Do transfer
```

```

50 4. Close account
51 5. Log out
52 0. Exit
53 >1
54
55 Balance: 10000
56
57 1. Balance
58 2. Add income
59 3. Do transfer
60 4. Close account
61 5. Log out
62 0. Exit
63 >3
64
65 Transfer
66 Enter card number:
67 >4000003305160035
68 Probably you made mistake in the card number. Please try again!
69
70 1. Balance
71 2. Add income
72 3. Do transfer
73 4. Close account
74 5. Log out
75 0. Exit
76 >3
77
78 Transfer
79 Enter card number:
80 >4000003305061034
81 Such a card does not exist.
82
83 1. Balance
84 2. Add income
85 3. Do transfer
86 4. Close account
87 5. Log out
88 0. Exit
89 >3
90
91 Transfer
92 Enter card number:
93 >4000003305160034
94 Enter how much money you want to transfer:
95 >15000
96 Not enough money!
97
98 1. Balance
99 2. Add income
100 3. Do transfer
101 4. Close account
102 5. Log out
103 0. Exit
104 >3
105
106 Transfer
107 Enter card number:
108 >4000003305160034
109 Enter how much money you want to transfer:
110 >5000
111 Success!
112
113 1. Balance
114 2. Add income
115 3. Do transfer
116 4. Close account
117 5. Log out
118 0. Exit
119 >1
120
121 Balance: 5000
122
123 1. Balance
124 2. Add income
125 3. Do transfer
126 4. Close account
127 5. Log out
128 0. Exit
129
130 >0
131 Bye!

```

#### Example 2:

```

1 1. Create an account
2 2. Log into account
3 0. Exit
4 >1
5
6 Your card has been created
7 Your card number:
8 4000007916053702
9 Your card PIN:
10 6263
11
12 1. Create an account
13 2. Log into account
14 0. Exit
15 >2
16
17 Enter your card number:
18 >4000007916053702
19 Enter your PIN:
20 >6263

```


```
21
22 You have successfully logged in!
23
24 1. Balance
25 2. Add income
26 3. Do transfer
27 4. Close account
28 5. Log out
29 0. Exit
30 >4
31
32 The account has been closed!
33
34 1. Create an account
35 2. Log into account
36 0. Exit
37 >2
38
39 Enter your card number:
40 >4000007916053702
41 Enter your PIN:
42 >6263
43
44 Wrong card number or PIN!
45
46 1. Create an account
47 2. Log into account
48 0. Exit
49 >0
50
51 Bye!
```

 Report a typo


 Write a program

Code Editor **IDE**

✓ IDE is responding IntelliJ IDEA 2020.2.1  
✓ EduTools plugin is responding 4.0-2020.2-799

 Solve in IDE

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