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Online Java Compiler IDE

https://www.jdoodle.com/online-java-compiler

```
public class Bank {
 1
 3
        private Customer[] customers; // Array to store customer accounts
 4
 5
         public Bank() {
             // Initialize the customer array with a fixed size initially
 7
             customers = new Customer[10];
 8
 9
        public void createAccount(String name, double balance) {
10
             // Find an empty slot in the customer array
11
             int index = findEmptySlot();
12
             if (index != -1) {
13
                 customers[index] = new Customer(name, balance);
15
                 System.out.println("Account created successfully for " + name);
16
                 System.out.println("Customer list is full. Account creation failed.");
17
18
19
        }
20
21
        public int findEmptySlot() {
22
             for (int i = 0; i < customers.length; i++) {</pre>
23
                 if (customers[i] == null) {
24
                     return i;
25
26
27
             return -1; // All slots are full
28
29
30
        public void deposit(String name, double amount) {
31
             Customer customer = findCustomer(name);
32
             if (customer != null) {
33
                 customer.deposit(amount);
34
                 System.out.println("Deposit successful for " + name + ". New balance: $" + customer.get
35
             } else {
                 System.out.println("Account not found for " + name);
36
37
             }
        }
38
39
40
        public void withdraw(String name, double amount) {
41
             Customer customer = findCustomer(name);
             if (customer != null) {
42
43
                 if (customer.withdraw(amount)) {
                     System.out.println("Withdrawal successful for " + name + ". New balance: $" + custo
44
45
                 } else {
46
                     System.out.println("Insufficient funds for withdrawal.");
                 }
47
48
             } else {
49
                 System.out.println("Account not found for " + name);
50
51
        }
52
53
        public void transfer(String fromName, String toName, double amount) {
54
             Customer fromCustomer = findCustomer(fromName);
55
             Customer toCustomer = findCustomer(toName);
56
57
             if (fromCustomer != null && toCustomer != null) {
58
                 if (fromCustomer.withdraw(amount)) {
59
                     toCustomer.deposit(amount);
                     System.out.println("Transfer successful from " + fromName + " to " + toName + ".");
60
61
                 } else {
                     System.out.println("Insufficient funds in " + fromName + "'s account.");
62
                 }
63
64
             } else
                                                                                         Share feedback
65
                 if (fromCustomer == null) {
```

```
66
                      System.out.println("Account not found for " + fromName);
67
68
                 if (toCustomer == null) {
69
                      System.out.println("Account not found for " + toName);
70
71
             }
72
         }
73
74
         private Customer findCustomer(String name) {
75
             for (Customer customer : customers) {
76
                  if (customer != null && customer.getName().equals(name)) {
77
                      return customer;
78
79
80
             return null;
81
82
83
         public static void main(String[] args) {
             // Create a Bank object
84
85
             Bank bank = new Bank();
86
              // Sample usage: Create accounts and perform transactions
87
             bank.createAccount("Alice", 100);
88
             bank.createAccount("Bob", 50);
89
90
             bank.deposit("Alice", 20);
91
             bank.withdraw("Bob", 30);
92
93
             bank.transfer("Alice", "Bob", 10);
94
     }
95
96
97
     class Customer {
98
99
         private String name;
100
         private double balance;
101
102
         public Customer(String name, double balance) {
103
             this.name = name;
104
             this.balance = balance;
105
106
107
         public String getName() {
108
             return name;
109
110
111
         public double getBalance() {
112
             return balance;
113
114
115
         public void deposit(double amount) {
116
             balance += amount;
117
118
119
         public boolean withdraw(double amount) {
120
             if (balance >= amount) {
121
                  balance -= amount;
122
                  return true;
123
              } else {
124
                 return false;
125
126
         }
127
     }
128
```



Account created successfully for Alice Account created successfully for Bob Deposit successful for Alice. New balance: \$120.0 Withdrawal successful for Bob. New balance: \$20.0 Transfer successful from Alice to Bob.

Compiled and & executed in 1.393 sec(s)

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