2.3-practice(java programming)

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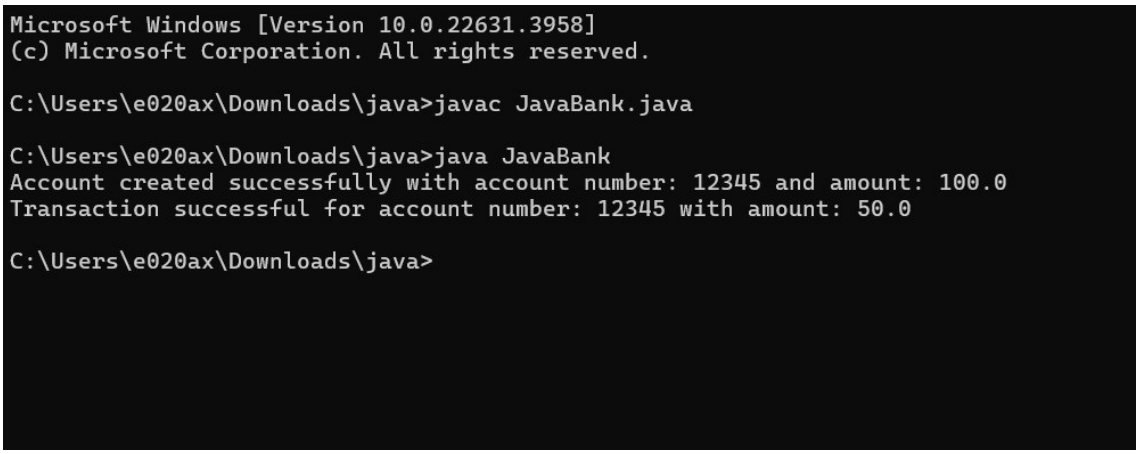
Code:

```
import javax.swing.*;


// Main class for JavaBank application
public class JavaBank {


   // Custom exception class
   public static class MyException extends Exception {
      public MyException(String message) {
         super(message);
      }
   }


   // Class to handle account creation
   public static class CreateAccount {
      public void createAccount(String accountNumber, String amountText) throws MyException {
         try {
            if (accountNumber.isEmpty()) {
               throw new MyException("Account number cannot be empty!");
            }
            double amount = Double.parseDouble(amountText);
            // Logic to create an account using accountNumber and amount
            System.out.println("Account created successfully with account number: " + accountNumber
+ " and amount: " + amount);
         } catch (NumberFormatException e) {
            throw new MyException("Invalid amount entered!");
         } catch (Exception e) {
```

```
            throw new MyException("An unhandled error occurred while creating the account!");
        }
    }
}

// Class to handle transactions
public static class MakeTransaction {
    public void makeTransaction(String accountNumber, String amountText) throws MyException {
        try {
            if (accountNumber.isEmpty()) {
                throw new MyException("Account number cannot be empty!");
            }
            double amount = Double.parseDouble(amountText);
            // Logic to perform a transaction using accountNumber and amount
            System.out.println("Transaction successful for account number: " + accountNumber + " with amount: " + amount);
        } catch (NumberFormatException e) {
            throw new MyException("Invalid amount entered!");
        } catch (Exception e) {
            throw new MyException("An unhandled error occurred while making the transaction!");
        }
    }
}

// Class to manage bank operations
public static class BankOperations {
    private CreateAccount createAccount;
    private MakeTransaction makeTransaction;

    public BankOperations() {
        createAccount = new CreateAccount();
```

```
        makeTransaction = new MakeTransaction();
    }

    public void performCreateAccountOperation(String accountNumber, String amountText) {
        try {
            createAccount.createAccount(accountNumber, amountText);
        } catch (MyException newExc) {
            System.out.println("Error: " + newExc.getMessage());
        }
    }

    public void performMakeTransactionOperation(String accountNumber, String amountText) {
        try {
            makeTransaction.makeTransaction(accountNumber, amountText);
        } catch (MyException newExc) {
            System.out.println("Error: " + newExc.getMessage());
        }
    }
  }

  public static void main(String[] args) {
    BankOperations operations = new BankOperations();

    String accountNumber = "12345"; // Example account number
    String amountText = "100.00"; // Example amount

    operations.performCreateAccountOperation(accountNumber, amountText);
    operations.performMakeTransactionOperation(accountNumber, "50.00");
  }
}
```

Output:


Microsoft Windows [Version 10.0.22631.3958]
(c) Microsoft Corporation. All rights reserved.
C:\Users\e020ax\Downloads\java>javac JavaBank.java
C:\Users\e020ax\Downloads\java>java JavaBank
Account created successfully with account number: 12345 and amount: 100.0
Transaction successful for account number: 12345 with amount: 50.0
C:\Users\e020ax\Downloads\java>