2.3-practice(java programming)

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Code:

```java
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) {
```

```java
            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();
```

```java
        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>
```