Assignment 4

mod 8

exercise 1

input 1

```
java TestExceptions
```

output 1

```
Exception caught: java.lang.ArrayIndexOutOfBoundsException: 0
Quiting...
```

input 2

```
java TestExceptions one two three
```

output 2

```
args[0] is 'one'
args[1] is 'two'
args[2] is 'three'
Exception caught: java.lang.ArrayIndexOutOfBoundsException: 3
Quiting...
```

exercise 2

input

N/A

output

```
Customer [Simms, Jane] has a checking balance of 200.0 with a 500.00 overdraft
protection.
Checking Acct [Jane Simms] : withdraw 150.00
Checking Acct [Jane Simms] : deposit 22.50
Checking Acct [Jane Simms] : withdraw 147.62
Checking Acct [Jane Simms] : withdraw 470.00
Exception: Insufficient funds for overdraft protection   Deficit: 470.0
Customer [Simms, Jane] has a checking balance of 0.0

Customer [Bryant, Owen] has a checking balance of 200.0
Checking Acct [Owen Bryant] : withdraw 100.00
Checking Acct [Owen Bryant] : deposit 25.00
Checking Acct [Owen Bryant] : withdraw 175.00
Exception: No overdraft protection   Deficit: 50.0
```

```
Customer [Bryant, Owen] has a checking balance of 125.0
```

mod 9

exercise 3

input

N/A

output

```
                    CUSTOMERS REPORT
                    ================

 Customer: Simms, Jane
        Savings Account: current balance is ¥500.00
        Checking Account: current balance is ¥200.00

 Customer: Bryant, Owen
        Checking Account: current balance is ¥200.00

 Customer: Soley, Tim
        Savings Account: current balance is ¥1,500.00
        Checking Account: current balance is ¥200.00

 Customer: Soley, Maria
        Checking Account: current balance is ¥200.00
        Savings Account: current balance is ¥150.00
```

optional

input

N/A

output

```
                    CUSTOMERS REPORT
                    ================

 Customer: Simms, Jane
        Savings Account: current balance is ¥500.00
        Checking Account: current balance is ¥200.00

 Customer: Bryant, Owen
        Checking Account: current balance is ¥200.00

 Customer: Soley, Tim
        Savings Account: current balance is ¥1,500.00
        Checking Account: current balance is ¥200.00

 Customer: Soley, Maria
        Checking Account: current balance is ¥200.00
        Savings Account: current balance is ¥150.00
```

exercise 4

input

N/A

output

```
                    CUSTOMERS REPORT
                    ================

 Customer: Bryant, Owen
     Checking Account: current balance is 200,00 €

 Customer: Simms, Jane
     Savings Account: current balance is 500,00 €
     Checking Account: current balance is 200,00 €

 Customer: Soley, Maria
     Checking Account: current balance is 200,00 €
     Savings Account: current balance is 150,00 €


 Customer: Soley, Tim
     Savings Account: current balance is 1.500,00 €
     Checking Account: current balance is 200,00 €
```

exercise 5

input

N/A

output

in the directory ./doc

exercise 6

input

```
java -classpath "banking.jar;." TestBanking
```

Explaining:

The operation we do is to pack the `bank library` into the `jar` file, and the `-classpath` is to specified where the jvm should search for the dependence. Meanwhile, the colon is a separator and the dot means current directory. So, this parameter is supposed to tell the jvm, the class file might in the `banking.jar` or current directory.

However, actually there is a small problem: the colon is used on *nix, while the semicolon should be used on windows. In this case, if someone run the command in the description directly, he is mostly to get the error message: 错误：找不到或无法加载主类 `TestBanking`.

Also, the `;.` is necessary, because our `TestBanking` is not in the `banking.jar`, and jvm needs to search for the `TestBanking.class` in the current directory.

output

```
                    CUSTOMERS REPORT
                    ================


Customer: Bryant, Owen
      Checking Account: current balance is ￥200.00

Customer: Simms, Jane
      Savings Account: current balance is ￥500.00
      Checking Account: current balance is ￥200.00

Customer: Soley, Maria
      Checking Account: current balance is ￥200.00
      Savings Account: current balance is ￥150.00

Customer: Soley, Tim
      Savings Account: current balance is ￥1,500.00
      Checking Account: current balance is ￥200.00
```