Exercise 02

2.1 （金融：货币兑换）

编写一个程序，提示用户输入从美元到人民币的兑换汇率。提示用户输入0表示从美元兑换为人民币，输入1表示从人民币兑换为美元。继而提示用户输入美元数量或者人民币数量，分别兑换为另一种货币。

下面是运行示例。

```
Enter the exchange rate from dollars to RMB: 6.81 Enter
Enter 0 to convert dollars to RMB and 1 vice versa: 0 Enter
Enter the dollar amount:  100 Enter
$100.0 is 681.0 yuan
```

```
Enter the exchange rate from dollars to RMB: 6.81 Enter
Enter 0 to convert dollars to RMB and 1 vice versa: 1 Enter
Enter the RMB amount:  10000 Enter
10000.0 yuan is $1468.43
```

Exercise 02

2.2 （100以内加减法进位退位 Quiz 程序）

编写一个程序，基本功能要求为可以供小学生进行100以内加减法（含进退位）练习和测试，发挥空间包括更符合小朋友练习和考试的场景的设计。

2.3 中国新个人所得税政策的个税计算器（开放题目）

2.4 用选取的IDE以及2.3的程序为目标，进行debug的实验报告。

Exercise 02

2.5 Displaying Prime Numbers

Problem: Write a program that displays the first 50 prime numbers in five lines, each of which contains 10 numbers. An integer greater than 1 is *prime* if its only positive divisor is 1 or itself. For example, 2, 3, 5, and 7 are prime numbers, but 4, 6, 8, and 9 are not.

Solution: The problem can be broken into the following tasks:

- For number = 2, 3, 4, 5, 6, ..., test whether the number is prime.
- Determine whether a given number is prime.
- Count the prime numbers.
- Print each prime number, and print 10 numbers per line.

破损的PrimeNumber.java

Exercise 02

2.6 判断一个字符串是否回文字符串，及 “mom”, ”noon”