Programming Exercise 10.8

10.8 Making Excel Spreadsheets

Purpose. Write a program that output's an Excel spreadsheet XLS file.

Modify Exercise 7.3's `changeDue4.cpp`, replacing its console output with XLS file output. Name the new program **excelXls.cpp**.

Requirements: same as 7.3's Making Change, v.4.0, with these changes

1. Output to a text file named **change.xls**, in addition to console output.

2. Do *not* include a replay-loop – just gather one set of input values, calculate, and send output to the console and to the XLS file.

Program I/O. Input: 2 whole numbers from the console keyboard, first for the "cash payment" and then for the amount "tendered". Output: To the console screen, the "change due" and the numbers of each specified denomination to be "paid out", skipping zeros. To the **change.xls** file, a header row for two columns: "denomination" and "total", and a row for each non-zero denomination's total.
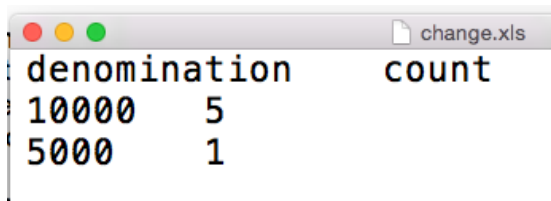
Supplemental. Read about XLS file output in www.rdb3.com/cpp/exercises/xls.supplemental.pdf.

Example. Here's what the output should look like:

```
Cash payment amount: 45000
Tendered amount: 100000
Change due: 55000

Change paid out in:
  this many ten thousand dollar bills: 5
  this many five thousand dollar bills: 1
```

…and here's what the **change.xls** file should look like when viewed in a text editor:

…and here's what the **change.xls** file should look like when opened in Excel:

Programming Exercise 10.8

10.8 Making Excel Spreadsheets

Purpose. Write a program that output's an Excel spreadsheet XLS file.

Modify Exercise 7.3's `ChangeDue4.java`, replacing its console output with XLS file output. Name the new program **ExcelXls.java**.

Requirements: same as 7.3's Making Change, v.4.0, with these changes

1. Output to a text file named **change.xls**, in addition to console output.

2. Do *not* include a replay-loop – just gather one set of input values, calculate, and send output to the console and to the XLS file**.**

Program I/O. Input: 2 whole numbers from the console keyboard, first for the "cash payment" and then for the amount "tendered". Output: To the console screen, the "change due" and the numbers of each specified denomination to be "paid out", skipping zeros. To the **change.xls** file, a header row for two columns: "denomination" and "total", and a row for each non-zero denomination's total.
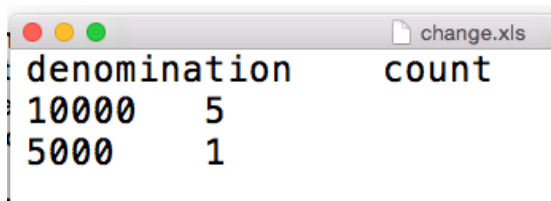
Supplemental. Read about XLS file output in www.rdb3.com/java/exercises/xls.supplemental.pdf.

Example. Here's what the output should look like:

```
Cash payment amount: 45000
Tendered amount: 100000
Change due: 55000

Change paid out in:
  this many ten thousand dollar bills: 5
  this many five thousand dollar bills: 1
```

…and here's what the **change.xls** file should look like when viewed in a text editor:

…and here's what the **change.xls** file should look like when opened in Excel:

Programming Exercise 10.8

10.8 Making Excel Spreadsheets

Purpose. Write a program that output's an Excel spreadsheet XLS file.

Modify Exercise 7.3's `changeDue4.py`, replacing its console output with XLS file output. Name the new program **excelXls.py**.

Requirements: same as 7.3's Making Change, v.4.0, with these changes

1. Output to a text file named **change.xls**, in addition to console output.

2. Do *not* include a replay-loop – just gather one set of input values, calculate, and send output to the console and to the XLS file**.**

Program I/O. Input: 2 whole numbers from the console keyboard, first for the "cash payment" and then for the amount "tendered". Output: To the console screen, the "change due" and the numbers of each specified denomination to be "paid out", skipping zeros. To the **change.xls** file, a header row for two columns: "denomination" and "total", and a row for each non-zero denomination's total.
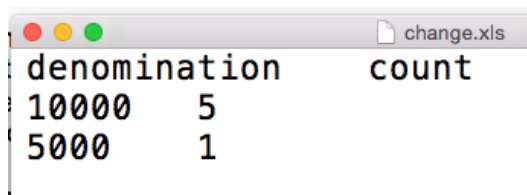
Supplemental. Read about XLS file output in
http://www.rdb3.com/python/exercises/xls.supplemental.pdf.

Example. Here's what the output should look like:

```
Cash payment amount: 45000
Tendered amount: 100000
Change due: 55000

Change paid out in:
  this many ten thousand dollar bills: 5
  this many five thousand dollar bills: 1
```

…and here's what the **change.xls** file should look like when viewed in a text editor:

…and here's what the **change.xls** file should look like when opened in Excel: