Programming Exercise 6.3

Making Change, v.3.0

Purpose. Practice writing programs that use if-statements.

Modify Exercise 5.3's changeDue2.cpp, skipping lines in the "Change paid out" section of the output that have zero bills. Name the new program changeDue3.cpp.

Requirements: same as 5.3's Making Change, with this one change: skip lines of output in the "Change paid out in" section that have zero bills.

Algorithm. This is only a *partial* algorithm, to calculate the number of bills of a certain denomination to be paid out. For example, for \$100 bills to be paid out:

```
Divide the change due by 100 to get the number of $100 bills in the change. Recalculate the change due as the remainder in the above division problem.

...

If the number of $100 bills is greater than zero
Output the the number of $100 bills, with a label
```

Program I/O. <u>Input:</u> 2 whole numbers from a text file for the "cash payment" (one first line of the file) and for the amount "tendered" (on the second line of the file) <u>Output</u>: The "change due" and the numbers of each specified denomination to be "paid out", skipping zeros.

Example. Here's what the output should look like, with user input in blue:

```
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
```