

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. Input: 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) Output: 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