Changer Project

The given program makes change for a dollar, given a cost. You are to "grow" this program in all of the following ways, ending up with one larger program, not many smaller ones.

a. Enter the given program.

b. Modify it to prompt and input the cost and any amount tendered.

c. Extend it to include dimes and half dollars.

d. Grow it further to print out also the total amount of change (in cents).

e. Add any other modification that you can think of.

f. Turn in one final program with sufficient sample runs, some hand checked.

-- Name An Omynous
-- Does make change from a dollar given cost

Boxes pennies, nickels, quarters,
cents, cost, amount ofType int

-- Setup the cost, amount tendered and cents
Set cost = 11
Set cents = 100 - cost --remaining cents

-- Divide cents by 25 for quarters and cents
Set quarters = cents / 25
Set cents = cents % 25

-- Divide cents by 5 for nickels and pennies
Set nickels = cents / 5
Set pennies = cents % 5

-- Output change: larger denominations first
Output "The number of quarters is "
Outputln quarters

Output "The number of nickels is "
Outputln nickels

Output "The number of pennies is "
Outputln pennies

Outputln " " -- gap between tests

-----------------------------
-- a run:
"The number of quarters is 3"
"The number of nickels is 2"
"The number of pennies is 4"