

Design an Inventory class that can hold information and calculate data for items in a retail store's inventory. The class should have the following *private* member variables:

Variable Name	Description
itemNumber	an int that holds the item's item number.
quantity	an int for holding the quantity of the items on-hand.
cost	a double for holding the wholesale per-unit cost of the item.
totalCost	a double for holding the total inventory cost of the item (calculated as quantity times cost).

The class should have the following *public* member functions:

Member Function	Description
Default Constructor	sets all the member variables to 0.
Constructor #2	accepts an item's number, cost, and quantity as arguments. The function should copy these values to the appropriate member variables and then call the setTotalCost function.
setItemNumber	accept an integer argument that is copied to the itemNumber member variable.
setQuantity	accepts an integer argument that is copied to the quantity member variable.
setCost	accepts a double argument that is copied to the cost member variable.
setTotalCost	calculates the total inventory cost for the item (quantity times cost) and stores the result in totalCost.
getItemNumber	returns the value in itemNumber.
getQuantity	returns the value in quantity.
getCost	returns the value in cost.
getTotalCost	returns the value in totalCost.

Demonstrate the class in a driver program.

Input Validation: Do not accept negative values for item number, quantity, or cost.

This rubbish copied from Starting out with C++: From Control Structures through Objects, Fifth Edition by Tony Gaddis, page 800. As much original formatting is preserved as is practical.