

AP Computer Science Mr Hanley

[The Hood](#)

Coffee Seller Homework

Ver: 3.1

Last Updated: 10/31/2022



Coffee Seller Homework

Write a program to calculate the optimal number of boxes to ship a desired number of bags of coffee!

The MadMan Hanley Coffee Company ships coffee via online order.

They would like to optimize the number of boxes in order to provide the cheapest cost (FIRST) and the minimal number of boxes (SECOND) for their customers.

A bag of coffee costs \$5.25.

A large box fits **20 bags**, a medium fits **10 bags** and a small fits **5 bags**.

When an order comes in, The shipper uses your program to optimize the number of boxes used to ship the coffee.

Large boxes costs **\$2**, medium **\$1** and small **\$.50**

For example, even though 16 bags COULD be shipped with 1 large or 2 medium, 1 large is preferable for minimizing boxes.

Allow the user to enter how many bags of coffee to buy and then tell them the **number of each box** and **total cost(including shipping)**.

You can use console or Swing

Coffee Seller Test Data

1. 39 bags

1 L, 1 M, 2 Sm or 2 L: Remember to minimize boxes when prices equal

2. 35 bags

1 L, 1 M, 1 Sm or 2 L: Choose the cheaper cost

3. 9 bags

1 L or 1 M or 2 Sm : Fewer boxes, take the Medium

4. 19 bags

1 L or 2M or 1 M and 2 Sm: Fewer boxes

If doing a Console Project...

Project Name	CoffeeSellerHW
Class 1 Name	CoffeeSeller

If doing a Swing Project...

Project Name	CoffeeSellerHW
Class 1 Name	CoffeeApp
Class 2 Name	CoffeeFrame

Enter number of bags desired(\$5.25 each), -1 to quit

12

Large Boxes: 0.0
Medium Boxes: 1.0
Small Boxes: 1.0
Total Cost: \$64.5

Enter number of bags desired(\$5.25 each), -1 to quit

10

Large Boxes: 0.0
Medium Boxes: 1.0
Small Boxes: 0.0
Total Cost: \$53.5

Enter number of bags desired(\$5.25 each), -1 to quit

45

Large Boxes: 2.0
 Medium Boxes: 0.0
 Small Boxes: 1.0
 Total Cost: \$240.75

Enter number of bags desired(\$5.25 each), -1 to quit

-1

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5 cases	25

