

Shipping cost

Cargos from multiple agents had arrived. The agents have provided each cargo's detail as a string in the following format <Length,Width,Weight,Type>.

For example,

2452,400,265,460,Non-Food,DRY

3345,170,455,350,FOOD,COLD

Here type determines if the Cargo needs to be shipped in a Cold Storage container or a Dry storage container and each Cargo has a different shipping cost as given below..,

Type of Storage	Shipping cost
Cold	\$1.85/Kg
Dry	\$0.90/Kg

Given the number of cargos and the cargo details, print the shipping cost for each cargo based on its weight and storage type using multiple threads.

Create a class named **Cargo** with the following **private members**

- Long id
- Integer length
- Integer width
- Integer weight
- String cargoType
- String storageType
- Static String DRY_STORAGE
- Static String COLD_STORAGE

Include appropriate getters and setters and also include the following constructor in the cargo class

specifier	uctor	e
	argo(String s)	etrized constructor that take a string argument. The constructor will the parse the string and assign values to the member variables

Create another class named **ShippingCostThread** that extends the **Thread** class with the following **private member variables**

- List <Cargo>cargoList
- List <Double>priceList

Include appropriate getters and setters. And include a method as follows

	id name	id description
	void run()	In the run method, here you iterate the cargo list and calculate the shipping cost of each cargo and finally append the shipping cost of the corresponding cargo to the pricelist

Any ith cargo in the cargo List will have its shipping coast in the ith index of price list.

Get inputs in the Main method

- Parse the input string (cargo detail) and create multiple cargo objects
- Divide the Cargo detail list into two halves
- Create two thread instances and pass the first half of the cargo list to 1st thread and other half to 2nd thread and start the threads
- Once both the threads are done calculating the prices of the cargos, print the price values from the price list of the threads.

[Note : Strictly adhere to the object oriented specifications given as a part of the problem statement. Use the same class names,attribute names and method names.]

Input Format

The first line of input contains an integer n, the number of cargo details, The next n lines contains comma-separated string that corresponds to the Cargo details, where each line contains one cargo's detail.

Output Format

The output is a list of double values, each cargo's price printed in a newline. Please refer to the sample input and output for more details.

[All text in bold corresponds to input and rest corresponds to output.]

Sample Input and Output :

Enter the number ofCargo:

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Enter cargo details (id,length,width,weight,cargo type,storage type):

1556,200,250,150,Food,DRY

2452,400,265,460,Non-Food,DRY

3345,170,455,350,FOOD,COLD

4845,120,100,250,FOOD,COLD

Price List:

135.0

414.0

647.5

462.5