Oil Stores

**Avaliable from**: Friday, 12 April 2019, 12:30 PM  
**Grade settings**: Maximum grade: 100  
**Disable external file upload, paste and drop external content**: Yes  
**Run**: Yes **Evaluate**: Yes  
**Automatic grade**: Yes

Lio owns one of the leading Oil stores in the city with two outlets. In one of the outlets he sells edible oil and in the other one, Non-edible oil. He plans to automate the process in his store as the sales increase. He wants the system to store Oil details and help him generate bills.

Oil name, packet capacity (in milliliter), category like edible (E) or non-edible (N) and cost per pack are the expected details to be stored in the system. And whenever a customer buys an oil packet, for the given quantity (in liters) the bill needs to be calculated.

You being their software consultant have been approached to develop software to implement the functionality of calculating the bill for the customers.

**Component Specification: Oil**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type(Class)** | **Attributes** | **Methods** | **Responsibilities** |
| **Oil** | String name  int pack  char category  float cost | Include the getters and setters method for all the attributes.  Include a parametrized constructor of four arguments in the order – name,pack,category,cost to intialize the values for the Oil object |  |

**Note:**The class and methods should be declared as public and all the attributes should be declared as private.

**Requirement 1: Being able to calculate the bill for the customers**

As per this requirement, the system should be able to calculate the bill for the quantity(in Liters) to be purchased by their customers.

**Component Specification: Oil**

|  |  |  |  |
| --- | --- | --- | --- |
| **Component Name** | **Type(Class)** | **Methods** | **Responsibilities** |
| Calculate the bill for the customers | Oil | public float calculateTotalCost(float qty) | This method should accept a quantity to be purchased as a parameter and calculate the total bill of the customer and return the same |

In the **Main**class, Get the oil details purchased by the customer as shown in the sample input.

Create an object for the Oil class and invoke the **calculateTotalCost** method in Oil class.

Invoke the corresponding getters to display the total bill as shown in the Sample Output

**Note:**

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.  
Ensure to follow the object-oriented specifications provided in the question.

Ensure to provide the names for classes, attributes, and methods as specified in the question.

Adhere to the code template, if provided.

**Sample Input 1:**

Enter oil name

**Coconut**

Enter pack capacity

**250**

Enter category

**E**

Enter cost

**80**

Enter Quantity to purchase

**1**

**Sample Output 1:**

Oil cost Rs.320.0

**Sample Input 2:**

Enter oil name

**Neem**

Enter pack capacity

**500**

Enter category

**N**

Enter cost

**145**

Enter Quantity to purchase

**1.5**

**Sample Output 2:**

Oil cost Rs.435.0