

An ice-cream Company buys fresh milk from local farmers. There are 3 types of milk depending on their quality.

- A Grade → High Quality milk, cost per liter → Rs.750/=
- B Grade → Medium Quality milk, cost per liter → Rs.600/=
- C Grade → Low Quality milk, cost per liter → Rs.500/=

Company uses this milk to make ice-cream for their customers depending on the quality. The amount of ice-cream that can be made with a 1 liter of milk can vary as follows,

- From High Quality → 2 liters
- From medium Quality → 1.5 liters
- From low Quality → 1 liter

Company makes 3 different flavors of ice-cream, and their prices are as below

- Chocolate → 1500 per liter
- Strawberry → 1200 per liter
- Vanilla → 1000 per liter

You are requested to develop a java application using OOP concepts to,

Take milk quantity bought , grade of milk and the flavor of ice-cream as inputs and Calculate

- The total expenses of the company for that sale,
- Total Income company obtained by that sale
- Net profit from that sale.

You are required follow following structure

- class → Milk → **Variables**
private → price,
private → gradeOfMilk
Methods
calculateTotalcost()

Sub classes

- HighQualityMilk →
- MidQualityMilk →
- LowQualityMilk →

- class → Ice-cream → **Variables**
 - Private → flavor
 - Quantity made**Methods**
 - totalIncome()

Sub Classes

- Chocolate →
 - Vanilla →
 - Strawberry →
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- Class Main → main method, calculate net income

You are free to use other necessary variables and methods in relevant classes.