

Supermarket Billing

Choices supermarket is a self-service store offering a wide variety of food, beverages and household products, organised into various categories. The categories can have subcategories. Subcategories have items under them

Items can be sold by

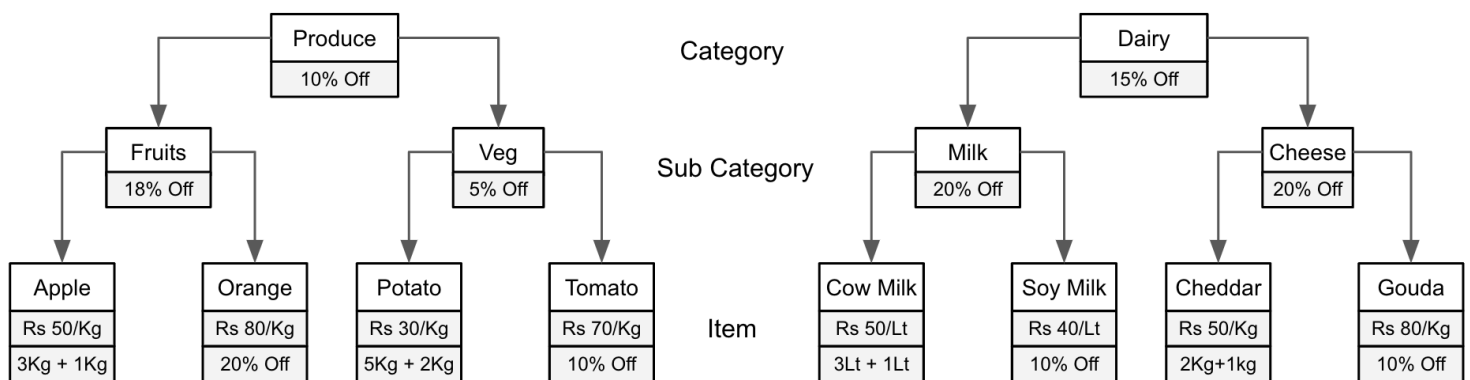
1. Weight e.g. Kilogram, Gram
2. Volume e.g. Litres, Mililitres
3. Numbers e.g. 5, dozen

Every item has a price for which it can be sold. Supermarket intuitive employs various discounting strategies. Some of the strategies are.

1. Discounts on categories, subcategories and items price e.g. 15% discount on fruits
 1. Only one discount can be applied on an item from its category tree. The maximum discount from the category branch should be chosen.
2. Giving free items with purchase e.g. buy 2 get 1 free
 1. **Category discount will not be applicable.**

If a customer buys some items you have to print the invoice with item details and total bill. Along with this print the amount the customer has saved on discounts.

Reference data: Please initialize application with following data



Input:

Customer Anish Kumar buys following items

Apple 6Kg, Orange 2Kg, Potato 14Kg, Tomato 3Kg, Cow Milk 8Lt, Gouda 2Kg

Output:

Following is the invoice that is generated based on the above items that customer has bought:

Customer: Anish Kumar

Item	Qty	Amount
Apple	6 Kg	250.00
Orange	2 Kg	128.00
Potato	14 Kg	300.00
Tomato	3 Kg	189.00
Cow Milk	8 Lt	300.00
Gouda	2 Kg	128.00
Total Amount		1295.00 Rs
You saved		1650.00 - 1295.00 = 355.00 Rs

EXTENSION:

Now, If the application has the following Additional input given by billing clerk (assume FlatDiscountinput.txt) :

chocolate - 21, fruit - 11, veg - 3, cheese - 13, bakery - 21

The app should parse the discount percentage from it, for the sub categories and then apply this flat discount to each item that Anish Kumar bought if the items belong to these given subcategories.