

Price calculation exercise

Create a customer basket that allows a customer to add products and provides a total cost of the basket including applicable discounts.

Available products:

Product	Cost
Butter	£0.80
Milk	£1.15
Bread	£1.00

Offers:

- Buy 2 Butter and get a Bread at 50% off
- Buy 3 Milk and get the 4th milk for free

Scenarios:

- **Given** the basket has 1 bread, 1 butter and 1 milk **when** I total the basket **then** the total should be £2.95
- **Given** the basket has 2 butter and 2 bread **when** I total the basket **then** the total should be £3.10
- **Given** the basket has 4 milk **when** I total the basket **then** the total should be £3.45
- **Given** the basket has 2 butter, 1 bread and 8 milk **when** I total the basket **then** the total should be £9.00

The solution should be in C#.

Pointers:

While we are looking for a solution that shows a good understanding of the *SOLID principles, object oriented programming (or functional)* and that displays a working knowledge of *TDD* (a git repository will be appreciated!), please *keep things simple*- do not over-engineer anything, make sure your code is manageable and easy to follow.

If you think your solution is too short, feel free to add some commentary to justify the decisions you've taken, if possible by quoting books, blog posts or talks that have influenced you in the way you've coded.

Above all, code as if you're coding for yourself.

