**Price calculation exercise**

**Problem Statement**

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

**Pointers**

* The solution should be in C#
* We expect to see a Git repository with commit history and .gitignore
* Keep it **simple**, **clean** and **readable** - overengineering is discouraged
* Display a working knowledge of TDD
* Think how it could be extended in the future
* Above all - code as if you're coding for yourself

This is problem does **not** require a database, a UI or a console application to be submitted to save time.

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

**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