

Supermarket checkout

Design a supermarket checkout that calculates the total price of a number of items. The checkout scans items we buy and provides a total amount when we're finished.

Goods are priced individually. In addition, some items are multi-priced: buy n of them, and they'll cost you y pounds. Our checkout accepts items in any order, so that if we scan a B, then an A, and then another B, we may recognize the two Bs and discount them to half price (for example).

As an example, today's prices are:

Item	Base price	Special offer
A	50	3 for 130
B	30	2 for 45
C	20	
D	15	

For extra bonus points:

1. Tomorrow we may offer a **meal deal** – 10% off the total price of a “meal” consisting of a main meal (A or B) together with a dessert (C or D).
2. Provide a receipt detailing the items purchased and any discounts applied.
3. Can you design your solution such that prices and discount rules can be changed quickly and without programming?