Online grocery store

Coding Language: C#

Background:

A concept online grocery store initially based the price of their product on an individual item cost. Previously, if a customer ordered 20 toilet rolls then they would be charged 20x the cost of a toilet roll. The store has decided to start selling their products pre-packaged in packs and charging the customer on a per pack basis. For example, if the store sells yoghurt in packs of 4 and 10 and a customer ordered 14 they would get a pack of 4 and a pack of 10. The store currently sells the following products:

Name	Code	Packs
Sliced Ham	SH3	3 @ $2.99, 5 @ $4.49
Yoghurt	YT2	4 @ $4.95, 10 @ $9.95, 15 @ $13.95
Toilet Rolls	TR	3 @ $2.95, 5 @ $4.45, 9 @ $7.99

Task:

Use the above table to reference the product item details.

Using the specified coding language, you are required to determine the cost and pack breakdown for each product to save on shipping space. Each order should contain the minimal number of packs.

Input:

Each order has a series of lines with each line containing the number of items followed by the product code. An example input:

```
10 SH3
18 YT2
12 TR
```

Output:

A successfully passing test(s) that demonstrates the following output:

```
10 SH3 $8.98
 2 x 5 $4.49
28 YT2 $29.80
  2 x 10 $9.95
  2 x 4 $4.95
12 TR $10.94
  1 x 9 $7.99
  1 x 3 $2.95
```

Advice:

- The input/output format is not important, do whatever feels reasonable.
- Include at least 1 test.
- Please put forward the code that you are happy to be deployed to production system. If something is not clear make an assumption and build with those assumptions in mind. Please ensure your assumptions are stored somewhere it can be viewed.