

# Double Double: Scoops with Trouble

Filename: double

After working hard competing in a programming event, Ula, Chad, and Fred decide to reward themselves with a tasty treat and visit the Universal Confection Factory (UCF) to get their favorite ice cream. There, they decide to order the largest ice cream cones their wallets can muster but are having trouble figuring out exactly how many scoops of ice cream a particular order would contain. Unfortunately, it seems like UCF has a peculiar method for ordering ice cream. Instead of specifying exactly how many scoops you want, you start with an ice cream cone containing 1 scoop and list qualifiers to increase the number of scoops by multiples. UCF offers the following qualifiers to an order:

| Qualifier | Multiplier |
|-----------|------------|
| Double    | $\times 2$ |
| Triple    | $\times 3$ |
| Quadruple | $\times 4$ |

For example, a Double Scoop ice cream will contain 2 scoops ( $1 \times 2 = 2$ ) while a Triple Quadruple Scoop ice cream will contain 12 scoops ( $1 \times 3 \times 4 = 12$ ). Each order will contain at least one of these qualifiers and each qualifier can be repeated as many times as needed. Unable to calculate the number of scoops involved in a large order in their heads, they ask you to write a program to do it for them.

## The Problem:

For each order, output the total number of scoops of ice cream that the order contains. Because multiple people will be ordering ice cream, your program should work for multiple orders.

## The Input:

The input consists of multiple ice cream orders. The input file begins with a positive integer,  $n$ , on a line by itself, which represents the number of orders that need to be processed. Each of the following  $n$  lines will contain 1 or more qualifiers followed by the word "Scoop" with each word separated by a single space. There will be at most 19 qualifiers in a particular order. The qualifiers can appear in any sequence, but "Scoop" will always be at the end of the line, signifying the end of the order. All of the input is case sensitive.

Despite the latest advancements in ice cream stacking technology, no ice cream cone will ever have more than 1,000,000 scoops.

## The Output:

For each order, output "Order # $i$ :  $x$ " where  $i$  is the current order number (starting at 1) and  $x$  is the total number of ice cream scoops in that order. Each order should be printed on its own line.

**Sample Input:**

```
3
Double Scoop
Triple Quadruple Scoop
Double Double Scoop
```

**Sample Output:**

```
Order #1: 2
Order #2: 12
Order #3: 4
```