

In the final counting sort challenge, you are required to print the data associated with each integer. This means, you will go through the original array to get the data, and then use some "helper arrays" to determine where to place everything in a sorted array.

## Challenge

You will be given a list that contains both integers and strings. In this challenge you just care about the integers. For every value  $i$  from **0** to **99**, can you output  **$L$** , the number of elements that are less than or equal to  $i$ ?

- $n$ , the size of the list  $ar$ .
- $n$  lines follow, each containing an integer  $x$  and a string  $s$ .

Output ***L*** for all numbers from **0** to **99** (inclusive).

$$\begin{aligned} 1 &\leq n \leq 1000000 \\ 0 &\leq x < 100, x \in ar \\ \text{length of string} &\leq 10 \end{aligned}$$

10  
4 that  
3 be  
0 to  
1 be  
5 question  
1 or  
2 not  
4 is  
2 to  
4 the

[illegible]

0 appears 1 time, so the 0<sup>th</sup> number is **1**.  
0 and 1 combined appear 3 times, so the next number is **3**.  
This continues for the rest of the list, until no more new numbers appear.

