

## Train

On the first line you will be given a **list of wagons** (integers). Each integer represents **the number of passengers that are currently in each wagon**. On the next line you will get **the max capacity of each wagon** (single integer). Until you receive "**end**" you will be given two types of input:

- **Add {passengers}** – add a wagon to the end with the given number of passengers.
- **{passengers}** - find an existing wagon to **fit all the passengers (starting from the first wagon)**

At the end **print the final state** of the train (all the wagons separated by a space)

## Example

Input	Output
32 54 21 12 4 0 23 75 Add 10 Add 0 30 10 75 End	72 54 21 12 4 75 23 10 0
0 0 0 10 2 4 10 Add 10 10 10 10 8 6 End	10 10 10 10 10 10 10