## 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 |