



Challenge: Morgan's Horse Hunt

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Difficulty: Medium

Submission Constraints:

- Time limit per test: **0,8 seconds**
- Memory limit per test: **Default (65 MB)**

Description

In the Wild West, Morgan finds himself in need of exactly **L** horses after losing his beloved companions. With a limited budget in hand that he must exhaust entirely without leaving a cent behind, Morgan embarks on a quest to replenish his stable. Your task is to assist Morgan in finding all possible combinations of horses he can purchase within his budget constraints.

Input

You will be given 4 lines:

- The first line contains the number **n**– the length of the horse array
- The next **n** lines contain integers representing the price of available horses.
- The next line contains an integer representing Morgan's budget.
- The last line contains the exact number of horses Morgan needs to purchase.

Output

all possible combinations of horses he can purchase within his budget constraints.

Note:

- The content of each inner list must be sorted in ascending order
- if there are two inner lists in which one is [1, 1, 2], and the second is [1, 1, 3] the [1, 1, 2] must be first in order, followed by [1, 1, 3]

Constraints

- $L \geq 2$



Examples:

Inputs	Outputs
9 41 2 39 4 8 13 46 41 23 77 4	[[2, 13, 23, 39]]
15 17 26 24 34 15 9 7 49 6 33 27 20 1 44 24 55 5	[[1, 6, 7, 15, 26], [1, 6, 7, 17, 24], [1, 6, 9, 15, 24]]