Problem 2 - The Lift

The problem for exam preparation for the <u>Programming Fundamentals Course @SoftUni</u>. Submit your solutions in the SoftUni judge system at https://judge.softuni.org/Contests/Practice/Index/2517#1.

Write a program that finds a place for the tourist on a lift.

Every wagon should have a maximum of 4 people on it. If a wagon is full, you should direct the people to the next one with space available.

Input

On the first line, you will receive how many people are waiting to get on the lift
On the second line, you will receive the current state of the lift separated by a single space: " "

Output

When there is no more available space left on the lift, or there are no more people in the queue, you should print on the console the final state of the lift's wagons separated by " " and one of the following messages:

□ If there are no more people and the lift has empty spots, you should print:
 "The lift has empty spots!
 {wagons separated by ' '}"
 □ If there are still people in the queue and no more available space, you should print:
 "There isn't enough space! {people} people in a queue!
 {wagons separated by ' '}"
 □ If the lift is full and there are no more people in the queue, you should print only the wagons separated by " ".

Examples

Input	Output	
15	The lift has empty spots!	
0 0 0 0	4 4 4 3	
Comment		
First state - 4 0 0 0 -> 11 people left Second state - 4 4 0 0 -> 7 people left Third state - 4 4 4 0 -> 3 people left		
Input	Output	
20	There isn't enough space! 10 people in a queue!	
0 2 0	4 4 4	
Comment		
First state - 4 2 0 -> 16 people left		



Second state - 4 4 0 -> 14 people left

Third state – 4 4 4 -> 10 people left, but there're no more wagons.















JS Examples

Input	Output
["15", "0 0 0 0 0"]	The lift has empty spaces! 4 4 4 3 0

Comment

First state - 4000 -> 11 people left Second state - 4400 -> 7 people left Third state - 4440 -> 3 people left

Input	Output
["20", "0 2 0"]	There isn't enough space! 10 people in a queue! 4 4 4

Comment

First state - 4 2 0 -> 16 people left

Second state – 4 4 0 -> 14 people left

Third state -444 -> 10 people left, but there're no more wagons.



















