Problem 2 - The Lift

Problem for exam preparation for the Programming Fundamentals Course @SoftUni.
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 have 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 0 0 0 0	The lift has empty spots! 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 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 – 4 4 4 -> 10 people left, but there're no more wagons.	

JS Examples

Input	Output

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

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