

Problem 2. Lists

Input / Constraints

You will be given a **single lines of elements(integers)**, separated with **one or more spaces**. You should check if **all elements in the line are unique**. If they are you should increase the value of every even element with the number of 2 and print the list on single row in ascending order separated by ",".

If they are not unique you should increase every odd element with the number of 3 and print them on single row, separated with ":"

On the next line you should print sum of the all elements divided by the count of the elements in the list. You should do that until you receive the command "stop playing"

Output

If the elements are unique

Unique list: {elements in the list, separated by ","}

Output: {sum of all elements divided by the length of the list}

Else

Non-unique list: {elements in the list, separated by ":"}

Output: {sum of all elements divided by the length of the list}

Examples

Input	Output	Comments
1 2 3 4 5 6 1 1 2 2 1 4 7 7 8 8 5 5 5 5 stop playing	Unique list: 1,3,4,5,6,8 Output: 4.50 Non-unique list: 2:2:4:4:4:4:8:8:10:10 Output: 5.60 Non-unique list: 8:8:8:8 Output: 8.00	First is unique so we add to every even elemnt 2. \the list looks like this: 1, 4, 3, 6,5,8 After that we order them by ascending and the same list looks like this: 1, 3, 4, 5, 6, 8 Output = $1+3+4+5+6+8 = 27/6 = 4.50$ The elements in the list are not unique, so we add to every odd element 3. \\\The list looks like this: 3:3:2:2:3:1:10:10:8:8 .We order them by ascending and it becomes: 2:2:4:4:4:4:8:8:10:10 Output $56/10 = 5.60$

		The elements are not unique so we add to every odd element 3 and becomes like this: 8:8:8:8 Output: $32/4 = 8$
Input	Output	Comments
1 1 1 stop playing	Non-unique list: 4:4:4 Output: 4.00	