

Page numbers

When listing document page numbers, it is common to use "-" for the first and last page numbers instead of all pages for at least 3 consecutive pages. Given page numbers needed to list, use the "-" sign to shorten the list

Input

The first line is N , $1 \leq N \leq 1000$, the page number listed.

The next line contains N integers, representing page numbers. The numbers are all unique.

Output

Print out a list of pages in order from smallest to largest.

Example

Input:

6

180 141 174 143 142 175

Output:

141-143 174 175 180