CMPUT 274 - Tangible Computing
Morning Problem: Bus Numbers

Description

Your favourite public transport company ETS wants to change signs on all bus stops. Some bus stops have quite a few buses that stop there and listing all the buses takes space. However, if for example buses 141, 142, 143 stop there, we can write 141–143 instead and this saves space. Note that just for two buses this does not save space so no hyphen would be added.

You are given a list of buses that stop at a bus stop. What is the shortest representation of this list?

Input

The first line of the input contains one integer N, $1 \leq N \leq 100,000$, the number of buses that stop at a bus stop. Then next line contains a list of N space separated integers between 1 and $100,000$, which denote the bus numbers. All numbers are distinct.

Output

Print the shortest representation of the list of bus numbers. Use the format as in the example, separate numbers with single spaces and output them in sorted order.

Sample Input 1

```
6
180 141 174 143 142 175
```

Sample Output 1

```
141-143 174 175 180
```

Sample Input 2

```
11
10 9 8 7 6 5 4 3 2 1 12
```

Sample Output 2

```
1-10 12
```

Sample Input 3

```
6
89 10 90 11 12 91
```

Sample Output 3

```
10-12 89-91
```