Problem 2: Lotto

(Easy)

(Adapted from UVa 00441)

In the German Lotto, you have to select 6 numbers from the set $\{1, 2, \ldots, 49\}$.

A popular strategy to play Lotto - although it doesn't increase your chance of winning — is to select a subset $\mathcal{S}$ containing k (where $k \leq 7$) of these 49 numbers, and then play several games by choosing numbers only from $\mathcal{S}$.

For example, for $k = 8$ and $\mathcal{S} = \{1, 2, 3, 5, 8, 13, 21, 34\}$ there are **28** possible games: $[1, 2, 3, 5, 8, 13], [1, 2, 3, 5, 8, 21], [1, 2, 3, 5, 8, 34], [1, 2, 3, 5, 13, 21], \cdots, [3, 5, 8, 13, 21, 3$.

Your job is to write a program that reads in the number k and the set $\mathcal{S}$ and then prints all possible games choosing numbers only from $\mathcal{S}$.

Input Format

The input consists of only two lines.

The first line contains the value of k.

The second line contains k integers **in ascending order** separated by spaces, specifying the set $\mathcal{S}$.

Constraints

- $7 \leq k \leq 12$
- Integers in the set $\mathcal{S}$ are between 1 and 49 inclusive.

The time limit for this problem is 3 seconds.

Output Format

Print all possible games, each game on one line.

The numbers of each game have to be sorted in ascending order and separated from each other by exactly one space. The games themselves have to be sorted lexicographically, which means sorted by the lowest number first, then by the second lowest and so on, as demonstrated in the sample output.

Sample Input 1

```
7
1 2 3 4 5 6 7
```

Sample Output 1

```
1 2 3 4 5 6
1 2 3 4 5 7
1 2 3 4 6 7
1 2 3 5 6 7
1 2 4 5 6 7
1 3 4 5 6 7
2 3 4 5 6 7
```

Sample Input 2

```
8
1 2 3 5 8 13 21 34
```

Sample Output 2

```
1 2 3 5 8 13
1 2 3 5 8 21
1 2 3 5 8 34
1 2 3 5 13 21
1 2 3 5 13 34
1 2 3 5 21 34
1 2 3 8 13 21
1 2 3 8 13 34
1 2 3 8 21 34
1 2 3 13 21 34
1 2 5 8 13 21
1 2 5 8 13 34
1 2 5 8 21 34
1 2 5 13 21 34
1 2 8 13 21 34
1 3 5 8 13 21
1 3 5 8 13 34
1 3 5 8 21 34
1 3 5 13 21 34
1 3 8 13 21 34
1 5 8 13 21 34
2 3 5 8 13 21
2 3 5 8 13 34
2 3 5 8 21 34
2 3 5 13 21 34
2 3 8 13 21 34
2 5 8 13 21 34
3 5 8 13 21 34
```