CPB221 Assignment 12

1. Ascending sort and special sort

- Ascending sort is a method of sorting in order from smallest value to largest value.

- Special sort is a sort that conforms to a special condition. The special conditions are as follows:
  - The number with larger remainder of dividing by 3 comes first.
  - If the remainders are the same, the smaller number comes first.

- Given N numbers, print the results of sorting in ascending order and special order, respectively.

- Note: Do not use the built-in modules or methods related to sort. If you use that, the score will be 0.

- Input: The numbers are given separated by spaces.

- Output: The ascending sort result is shown in the first line. The special sort result is shown in the second line.

Input

```
2 8 7 6 3 1 12
```

Output

```
1 2 3 6 7 8 12
2 8 1 7 3 6 12
```