11 Nilats Athletes
5 points

Introduction

Nilats was once an impressive athlete that is now in charge of the Naissur Sports Federation. He has been given the order to choose which athletes go to the Olympic Games and which do not.

In order to properly select the ones that will represent the country he has decided that the best option is to create an algorithm. The only problem is that he is really bad at making decisions, so he has implemented a rather particular way of choosing the athletes. Since all these incredible athletes have been showing amazing results, he has created an evaluation system and a divider, so all the athletes have been divided in groups of 8. Each of these athletes has a number (an integer, Nilats likes absolutes) that determines how likely they are to succeed in the sport they participate.

Since he is incredibly bad at properly choosing the athletes, he is thinking about an algorithm that will use those numbers that each athlete has. The logic is the following:

The algorithm should get the first number given to it and directly select that athlete, whatever number that athlete has. Then it will compare the score of the second athlete and if that athlete has a better score that the first one it will select him or her too. However, if the third one has a worse score than the second one that athlete will not go to the Olympics and it is removed from the input. If the fourth one has a greater score than the second one it will go to the Olympics. If not, it will be removed too. If they have the same score the athlete is also removed.

Could you help him write it since he is also really bad at coding?

Input

Eight integers separated by a space.

Output

From one to eight integers separated by a space.

Example 1

Input

1 2 3 6 4 5 3 6

Output

1 2 3 6

Example2

Input

8 7 6 6 7 8 9 9

Output

8 9