Algorithms Fundamentals with Python: Exam

Please submit your solutions (source code) to all the below-described problems in Judge.

3. Goals

You are given a list of numbers, representing the goals scored by a football team in each match played in the current season. You want to find the best sequence of matches where the **number of goals scored increases from one match to the next**.

For example, if the team's goal scores are [0, 1, 3, 2, 4, 6, 5], then the best subsequence is 5, corresponding to the sequence [0, 1, 3, 4, 6].

Assume that **ties are allowed**, i.e., a match where the team scores the **same number of goals** as in the previous match is considered to be **increasing**.

Input

- On the first line, you will receive the sequence of goals in the following format: **"{first_match_goals}, {second_match_goals}, …, {n_match_goals}"**.

Output

- Print the best sequence in the following format: **"{first_seq_goals} … {n_seq_goals}"**.

Constraints

- Numbers will be integers in the range **[1… 10]**.
- You may assume that the input list contains at least one element.

Examples

Input	Output
0, 1, 3, 2, 4, 6, 5	0 1 3 4 6
2, 2, 1, 5, 4, 6, 7, 3	2 2 5 6 7