

556. Next Greater Element III

Given a positive integer n , find the smallest integer which has exactly the same digits existing in the integer n and is greater in value than n . If no such positive integer exists, return -1 .

Note that the returned integer should fit in 32-bit integer, if there is a valid answer but it does not fit in 32-bit integer, return -1 .

Example 1:

- **Input:** $n = 12$
- **Output:** 21

Example 2:

- **Input:** $n = 21$
- **Output:** -1

Constraints:

- $1 \leq n \leq 2^{31} - 1$