


# Longest Continuous Increasing Subsequence

`current_len`: Tracks the length of the ongoing increasing subsequence. It resets to 1 when the sequence breaks.


`max_len`: Keeps the maximum length of all subsequences found so far, updating whenever `current_len` exceeds it.


[0],[1],[2],[3],[4]

[ 1, 3, 5, 4, 7 ]       Given array

[ 1, 3, 5, 4, 7 ]       Compare `nums[1]` with `nums[0]`  $3 > 1$ , `current_len` = 2, `max_len` = 1

[ 1, 3, 5, 4, 7 ]       Compare `nums[2]` with `nums[1]`  $5 > 3$ , `current_len` = 3, `max_len` = 1

[ 1, 3, 5, 4, 7 ]       Compare `nums[3]` with `nums[2]`  $4 < 5$ , `current_len` = 1, `max_len` = 3

[ 1, 3, 5, 4, 7 ]       Compare `nums[4]` with `nums[3]`  $7 > 4$ , `current_len` = 2, `max_len` = 3

**Output:** The longest continuous increasing subsequence has a length of 3.