

Quiz

Longest Increasing Subsequence

1.1.

Question 1 (1 pt)

Assume that we've already filled in the table T and computed the length of the longest increasing subsequence. Now, we would like to output the longest increasing subsequence itself. For this, we unwind it from right to left. What is the running time of the corresponding algorithm?

☐

$O(n)$

☐

$O(n^2)$

1.2.

Question 2 (1 pt)

Consider a brute force algorithm for the longest increasing subsequence: it just goes through all possible subsequences and among all of them that are increasing selects the longest one. What is the running time of this algorithm?

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$O(n^2)$

☐

$O(n)$

☐

$O(2^n)$

Between Polynomial and Exponential

2.1.

Question 1 (1 pt)

What is the edit distance between the strings "polynomial" and "exponential"?