

Week-3

1. You are given an array of length N , consisting of integers. Find the sum of the subarray (including empty subarray) having maximum sum among all subarrays and print the subarray

Note: The sum of an empty subarray is 0.

[2.5m]

2. Given an array `nums` of size n and an integer k , find the length of the longest sub-array and the total number of subarrays that sums to k . If no such sub-array exists, return 0.

[2.5m]

3. Find and print subarray with sum 0

[2.5m]

3. You are given daily stock prices of a company for n days.

[2.5m]

- Find the k -th smallest stock price without sorting in $O(n)$.
- Find the 90th percentile stock price (element at position $\lceil 0.9n \rceil$).
- Compare the performance of Linear Selection ($O(n)$) with the Sorting + Indexing ($O(n \log n)$) approach on large inputs.