

Kadane's Algorithm ek optimized technique hai maximum subarray sum dhondhne ke liye—aur iska beauty ye hai ke ye linear time mein kaam karta hai, yani O(n)! 🌟 Chalo tumhein simple aur Roman Urdu style mein samjhata hoon:

❖ Problem Statement

Tumhare paas aik array hai (positive + negative numbers). Tumhein pata karna hai ke konsa continuous subarray sabse zyada sum produce karta hai.

❖ Kadane's Approach (Step-by-Step)

1. Do Variables Use Karte Hain:
 - o current_sum → ab tak ka best sum jo continue kar sakta hai
 - o max_sum → overall max sum jo ab tak mila hai
2. Har Element ko Traverse Karne Hain:
 - o Har element par current_sum update karo:
 - Ya to current_sum + current_element
 - Ya sif current_element
 - Jo bhi bada ho, usay choose karo
 - o Phir max_sum ko update karo agar current_sum us se bada ho
3. Negative Values Handle Hotti Hain Smartly
 - o Agar current_sum negative ho jaye, to reset ho kar next element se start hota hai

❖ Real-Life Example

Socho tumhari salary monthly fluctuate karti hai (kabhi zyada kabhi kam). Tum dekhna chahte ho ke kaunsa consecutive months ka group tumhein highest total de raha hai. Kadane's Algorithm wohi max-streak identify karta hai 🌟

❖ Summary Line

Kadane's Algorithm dynamically decide karta hai ke kis point par subarray ko continue karna chahiye aur kab naya start lena chahiye—taake max sum mile.

Chahao to next turn mein ek example array de kar explanation step-by-step kar sakta hoon. Ya tum khud code likhne ja rahe ho? 😊

CS(Current Sum) --> current sum yani chalta hoa sum means (-2-3) isitarha(-2-3+4) likh hamara logic kehta hai ager current sum mai value -ve aye to usko zero kai equal kardo. To current sum mai value ko tab tak add kartai rahai gai jab tak final output hamara positive rehta hai .

Current Sum ki starting value zero or Max sum ki starting value infinity hai

Sab sae pehlai



Explain of
kadane al...



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kadane al...

Audio recording started: 10:26 PM Monday, July 21, 2025