

Greedy Algorithms

贪心是一种算法,总是选择下一个提供最明显和直接利益的部分来构建最终的解决方案

贪心可以解决以下几个典型问题:

- 1. Kruskal 最小生成树
- 2. Prim 最小生成树
- 3. Dljkstra 最短路径
- 4. 霍夫曼编码

Standard Greedy Algorithms

N meetings in one room

Job Sequencing Problem

Huffman Encoding

Huffman Decoding

Policemen catch thieves

Minimum Swaps for Bracket Balancing

Assign Mice Holes

Greedy Algorithms in Arrays

Minimum product subset of an array

Maximize array sum after K negations (TODO)

Maximize ∑arr[i]*i of an Array

Greedy Algorithms 1

Maximum sum of increasing order elements from n arrays

Maximum sum of absolute difference of an array

Swap and Maximize

Find maximum height pyramid from the given array of objects

Partition into two subarrays of lengths k and (N – k) such that the difference of sums is maximum

Minimum sum of product of two arrays

Minimum sum by choosing minimum of pairs from array

Minimum operations to make GCD of array a multiple of k

Min sum formed by digits

Minimum increment/decrement to make array non-Increasing

Making elements of two arrays same with minimum increment/decrement

Sorting array with reverse around middle

Find if k bookings possible with given arrival and departure times

<u>Lexicographically smallest array after at-most K consecutive swaps</u>

<u>Largest lexicographic array with at-most K consecutive swaps</u>

Greedy Algorithms in Operating Systems

Program for First Fit algorithm in Memory Management

<u>Program for Best Fit algorithm in Memory Management</u>

Program for Worst Fit algorithm in Memory Management

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