

标签 线段树 下的文章

🏠 首页 (<https://blog.orzsiyuan.com/>) / 线段树

「2019 Multi-University Training Contest 2」 Longest Subarray
[\(https://blog.orzsiyuan.com/archives/2019-Multi-University-Training-Contest-2-Longest-Subarray/\)](https://blog.orzsiyuan.com/archives/2019-Multi-University-Training-Contest-2-Longest-Subarray/)

题目链接: HDU 6602 (<http://acm.hdu.edu.cn/showproblem.php?pid=6602>)

你有一个长度为 n 的序列 a 和两个整数 C, K 满足序列中的所有元素 $1 \leq a_i \leq C$ 。

我们定义一个连续子序列 a_l, a_{l+1}, \dots, a_r 是「好的」当且仅当:

$$\forall x \in [1, C], \sum_{i=l}^r [a_i = x] = 0 \text{ 或 } \sum_{i=l}^r [a_i = x] \geq K$$

抽象地, 如果一个数字在子序列中出现过, 那么它的出现次数必须不少于 K 次。

他需要求出「好的」连续子序列的最长长度。

本题有多组数据。

数据范围: $1 \leq n, C, K \leq 10^5$, $1 \leq a_i \leq C$, $1 \leq \sum n, \sum C, \sum K \leq 5 \times 10^5$ 。

👤 Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⏰ 2019 年 07 月 29 日

「NOI 2018」你的名字 (<https://blog.orzsiyuan.com/archives/NOI-2018-Your-Name/>)

题目链接: UOJ 395 (<http://uoj.ac/problem/395>)

小 A 被选为了 ION2018 的出题人, 他精心准备了一道质量十分高的题目, 且已经把除了题目命名以外的工作都做好了。

由于 ION 已经举办了很多届, 所以在题目命名上也是有规定的, ION 命题手册规定: 每年由命题委员会规定一个小写字母字符串, 我们称之为那一年的命名串, **要求每道题的名字必须是那一年的命名串的一个非空连续子串, 且不能和前一年的任何一道题目的名字相同。**

由于一些特殊的原因，小 A 不知道 ION2017 每道题的名字，但是他通过一些特殊手段得到了 ION2017 的命名串，现在小 A 有 Q 次询问：每次给定 ION2017 的命名串 S 和 ION2018 的命名串 T ，求有几种题目的命名，使得这个名字一定满足命题委员会的规定，即是 ION2018 的命名串的一个非空连续子串且一定不会和 ION2017 的任何一道题目的名字相同。

由于一些特殊原因，所有询问给出的 ION2017 的命名串都是某个串的连续子串 $S[l \dots r]$ 。

数据范围： $1 \leq |S| \leq 5 \times 10^5$, $1 \leq Q \leq 10^5$, $\sum |T| \leq 10^6$, $1 \leq l \leq r \leq |S|$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⊖ 2019 年 05 月 17 日

「Codeforces 700E」 Cool Slogans (<https://blog.orzsiyuan.com/archives/Codeforces-700E-Cool-Slogans/>)

题目链接：Codeforces 700E (<https://codeforces.com/contest/700/problem/E>)

Bomboslav 成立了一个品牌代理商，正在帮助公司创建商标和广告。就这个问题而言，公司的广告应该是其名称的非空子串。

有时，公司会对品牌进行重塑并改变广告。如果广告 B 作为子串在广告 A 中出现至少 2 次（允许重叠），那么认为广告 A 比 B 更酷。

你得到了某个公司的名字 w ，你的任务是帮助 Bomboslav 确定最长的广告序列 s_1, s_2, \dots, s_k 满足任何一个广告都比上一个更酷。

数据范围： $1 \leq |w| \leq 2 \times 10^5$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⊖ 2019 年 05 月 02 日

「Codeforces 1073G」 Yet Another LCP Problem (<https://blog.orzsiyuan.com/archives/Codeforces-1073G-Yet-Another-LCP-Problem/>)

题目链接：Codeforces 1073G (<https://codeforces.com/contest/1073/problem/G>)

定义 $LCP(s, t)$ 字符串 s 和 t 的最长公共前缀，再定义 $s[x \dots y]$ 为字符串 s 从位置 x 到 y 的子串。

给定一个长度为 n 的字符串 s 和 q 个询问。每次询问给出两个长度分别为 k_i, l_i 的序列 a, b 。你需要计算 $\sum_{i=1}^k \sum_{j=1}^{l_i} LCP(s[a_i \dots n], s[b_j \dots n])$ 的值。

数据范围： $1 \leq n, q, \sum k_i, \sum l_i \leq 2 \times 10^5$, $1 \leq k_i, l_i \leq n$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⊖ 2019 年 04 月 16 日

「ZJOI 2019」线段树 (<https://blog.orzsiyuan.com/archives/ZJOI-2019-Segment-Tree/>)

题目链接: LOJ 3043 (<https://loj.ac/problem/3043>)

九条可怜是一个喜欢数据结构的女孩子，在常见的数据结构中，可怜最喜欢的就是线段树。

线段树的核心是懒标记，下面是一个带懒标记的线段树的伪代码，其中 `tag` 数组为懒标记：

```

1: function PUSHDOWN(Node)
2:   if tag[Node]= 1 then
3:     tag[Lson(Node)]← 1
4:     tag[Rson(Node)]← 1
5:     tag[Node]← 0
6:   end if
7: end function
8:
9: function MODIFY(Node, l, r, ql, qr)
10:  if [l, r] ∩ [ql, qr] = ∅ then
11:    return
12:  end if
13:  if [l, r] ⊆ [ql, qr] then
14:    tag[Node] ← 1
15:    return
16:  end if
17:  m ← ⌊ $\frac{l+r}{2}$ ⌋
18:  PUSHDOWN(Node)
19:  MODIFY(Lson(Node),l, m, ql, qr)
20:  MODIFY(Rson(Node),m + 1, r, ql, qr)
21: end function

```

其中函数 `Lson(Node)` 表示 `Node` 的左儿子，`Rson(Node)` 表示 `Node` 的右儿子。

现在可怜手上有一棵 $[1, n]$ 上的线段树，编号为 1。这棵线段树上的所有节点的 `tag` 均为 0。接下来可怜进行了 m 次操作，操作有两种：

- 1 $l\ r$ ，假设可怜当前手上有 t 棵线段树，可怜会把每棵线段树复制两份（`tag` 数组也一起复制），原先编号为 i 的线段树复制得到的两棵编号为 $2i - 1$ 与 $2i$ ，在复制结束后，可怜手上一共有 $2t$ 棵线段树。接着，可怜会对所有编号为奇数的线段树进行一次 `Modify(root, 1, n, l, r)`。
- 2，可怜定义一棵线段树的权值为它上面有多少个节点 `tag` 为 1。可怜想要知道她手上所有线段树的权值和是多少。

数据范围： $1 \leq n, m \leq 10^5$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ◎ 2019 年 04 月 03 日

「CodeChef GERALD07」 Chef and Graph Queries (<https://blog.orzsiyuan.com/archives/CodeChef-GERALD07-Chef-and-Graph-Queries/>)

题目链接: CodeChef GERALD07 (<https://www.codechef.com/problems/GERALD07>)

大厨有一个无向图 G 。顶点从 1 到 n 标号，边从 1 到 m 标号。

大厨有 q 对询问 L_i, R_i 。对于每对询问，大厨想知道当仅保留编号 X 满足 $L_i \leq X \leq R_i$ 所在的边时，图 G 中有多少连通块。

注意数据可能包含自环和重边！

本题有 T 组数据。

数据范围: $1 \leq T \leq 10^3$, $1 \leq n, m, q \leq 2 \times 10^5$, $1 \leq L_i \leq R_i \leq M$, 所有的 n, m, q 的和均不超过 2×10^5 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ○ 2019 年 03 月 29 日

「Codeforces 280D」 K-Maximum Subsequence Sum (<https://blog.orzsiyuan.com/archives/Codeforces-280D-K-Maximum-Subsequence-Sum/>)

题目链接: Codeforces 280D (<https://codeforces.com/contest/280/problem/D>)

你有一个长度为 n 的序列 a_i , 接下来进行 m 次操作, 操作分为如下 2 种:

- $0\ i\ val$: 将第 i 个数 a_i 修改为 val 。
- $1\ l\ r\ k$: 你需要在序列 a_l, a_{l+1}, \dots, a_r 中找出至多 k 个不相交的子序列, 使得他们的和最大。形式化地, 你需要找出至多 k 对 $(x_1, y_1), (x_2, y_2), \dots, (x_t, y_t)$ (其中 $l \leq x_1 \leq y_1 < x_2 \leq y_2 < \dots < x_t \leq y_t \leq r$, $0 \leq t \leq k$) , 使得 $(a_{x_1} + a_{x_1+1} + \dots + a_{y_1}) + (a_{x_2} + a_{x_2+1} + \dots + a_{y_2}) + \dots + (a_{x_t} + a_{x_t+1} + \dots + a_{y_t})$ 的值最大。

特别地, 你可以选择 0 个子序列, 这时和式等于 0。

数据范围: $1 \leq n, m \leq 10^5$, $|a_i, val| \leq 500$, $1 \leq k \leq 20$, 求 k 个子序列和的操作不超过 10^4 个。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ○ 2019 年 03 月 19 日

「SPOJ 10628」 COT - Count on a Tree (<https://blog.orzsiyuan.com/archives/SPOJ-10628-COT/>)

题目链接: SPOJ 10628 (<https://www.spoj.com/problems/COT/>)

你有一棵 n 个节点的树，节点从 1 到 n 编号。每个点都有一个权值 a_i 。现在有 m 个询问，每个询问形如：

- $u \ v \ k$ ：求节点 u, v 之间的路径上的第 k 小权值。

数据范围： $1 \leq n, m \leq 10^5$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⊙ 2019 年 03 月 18 日

「Codeforces 813E」 Army Creation (<https://blog.orzsiyuan.com/archives/Codeforces-813E-Army-Creation/>)

题目链接：Codeforces 813E (<https://codeforces.com/contest/813/problem/E>)

Vova 非常喜欢玩电脑游戏，现在他正在玩一款叫做 Rage of Empires 的策略游戏。

在这个游戏里，Vova 可以雇佣 n 个不同的战士，第 i 个战士的类型为 a_i 。Vova 想要雇佣其中一些战士，从而建立一支平衡的军队。如果对于任何一种类型，军队中这种类型的战士都不超过 k ，那么这支军队就被称为平衡的。当然 Vova 想让这支军队的人数尽量多。

现在 Vova 有 q 个计划，第 i 个计划他只能雇佣区间 $[l_i, r_i]$ 之间的战士。对于每个计划，你要求出可以组建的平衡军队的最多人数。

本题强制在线，对于给定的 l_i, r_i ，我们设上一个计划的答案为 lastans （初始值为 0），实际的 l_i, r_i 通过如下方式生成：

1. $l_i \leftarrow ((l_i + \text{lastans}) \bmod n) + 1$ 。
2. $r_i \leftarrow ((r_i + \text{lastans}) \bmod n) + 1$ 。
3. 如果 $l_r > r_i$ ，交换 l_i 和 r_i 。

数据范围： $1 \leq n, k, q, a_i \leq 10^5$ 。

● Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⊙ 2019 年 03 月 18 日

「Luogu 2617」 Dynamic Rankings (<https://blog.orzsiyuan.com/archives/Luogu-2617-Dynamic-Rankings/>)

题目链接：Luogu 2617 (<https://www.luogu.org/problemnew/show/P2617>)

给定一个含有 n 个数的序列 a_i ，接下来有 m 个询问，询问分为以下 2 种：

- $Q \ i \ j \ k$ ：询问区间 $[i, j]$ 排序后的第 k 个数。
- $C \ i \ t$ ：将 a_i 修改为 t 。

数据范围： $1 \leq n, m \leq 10^5$, $0 \leq a_i \leq 10^9$ 。

👤 Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⏰ 2019 年 03 月 15 日

1 (<https://blog.orzsiyuan.com/tag/Segment-Tree/1/>)

2 (<https://blog.orzsiyuan.com/tag/Segment-Tree/2/>)

➤ (<https://blog.orzsiyuan.com/tag/Segment-Tree/2/>)



热门文章

(<https://blog.orzsiyuan.com/archives/ZJOI-2019/>)
2019/) 🕵 6051

(<https://blog.orzsiyuan.com/archives/hehezhou-AK-CSP-2019/>)
AK- 🕵 2892

CSP-
2019/) (<https://blog.orzsiyuan.com/archives/Polynomial-Template/>)
Template 🕵 1080

(<https://blog.orzsiyuan.com/archives/SDOI-2017-Number-Table/>)
2017- 🕵 1028

Number-
Table/) (<https://blog.orzsiyuan.com/archives/TJOI-2019-Sing-Dance-Rap-and-Basketball/>)
Sing- 🕵 843
Dance-
Rap-
and-
Basketball/)

博客信息

📄 文章数目	187
💬 评论数目	243
📅 运行天数	1年25天
🕒 最后活动	4 个月前

标签云

[Codeforces \(<https://blog.orzsiyuan.com/tag/Codeforces/>\)](https://blog.orzsiyuan.com/tag/Codeforces/)[数据结构 \(<https://blog.orzsiyuan.com/tag/Data-Structure/>\)](https://blog.orzsiyuan.com/tag/Data-Structure/)[动态规划 \(<https://blog.orzsiyuan.com/tag/Dynamic-Programming/>\)](https://blog.orzsiyuan.com/tag/Dynamic-Programming/)[数论 \(<https://blog.orzsiyuan.com/tag/Number-Theory/>\)](https://blog.orzsiyuan.com/tag/Number-Theory/) [图论 \(<https://blog.orzsiyuan.com/tag/Graph-Theory/>\)](https://blog.orzsiyuan.com/tag/Graph-Theory/)[贪心 \(<https://blog.orzsiyuan.com/tag/Greedy/>\)](https://blog.orzsiyuan.com/tag/Greedy/) [多项式 \(<https://blog.orzsiyuan.com/tag/Polynomial/>\)](https://blog.orzsiyuan.com/tag/Polynomial/)[字符串 \(<https://blog.orzsiyuan.com/tag/%E5%AD%97%E7%AC%A6%E4%B8%B2/>\)](https://blog.orzsiyuan.com/tag/%E5%AD%97%E7%AC%A6%E4%B8%B2/)[LOJ \(<https://blog.orzsiyuan.com/tag/LOJ/>\)](https://blog.orzsiyuan.com/tag/LOJ/) [FFT NTT \(<https://blog.orzsiyuan.com/tag/FFT-NTT/>\)](https://blog.orzsiyuan.com/tag/FFT-NTT/)[网络流 \(<https://blog.orzsiyuan.com/tag/Network-Flow/>\)](https://blog.orzsiyuan.com/tag/Network-Flow/) [LCT \(<https://blog.orzsiyuan.com/tag/LCT/>\)](https://blog.orzsiyuan.com/tag/LCT/)[计数 \(<https://blog.orzsiyuan.com/tag/%E8%AE%A1%E6%95%B0/>\)](https://blog.orzsiyuan.com/tag/%E8%AE%A1%E6%95%B0/)[后缀数组 \(<https://blog.orzsiyuan.com/tag/%E5%90%8E%E7%BC%80%E6%95%B0%E7%BB%84/>\)](https://blog.orzsiyuan.com/tag/%E5%90%8E%E7%BC%80%E6%95%B0%E7%BB%84/)[线段树 \(<https://blog.orzsiyuan.com/tag/Segment-Tree/>\)](https://blog.orzsiyuan.com/tag/Segment-Tree/)[构造 \(<https://blog.orzsiyuan.com/tag/%E6%9E%84%E9%80%A0/>\)](https://blog.orzsiyuan.com/tag/%E6%9E%84%E9%80%A0/) [HDU \(<https://blog.orzsiyuan.com/tag/HDU/>\)](https://blog.orzsiyuan.com/tag/HDU/)[SPOJ \(<https://blog.orzsiyuan.com/tag/SPOJ/>\)](https://blog.orzsiyuan.com/tag/SPOJ/) [Luogu \(<https://blog.orzsiyuan.com/tag/Luogu/>\)](https://blog.orzsiyuan.com/tag/Luogu/)[BZOJ \(<https://blog.orzsiyuan.com/tag/BZOJ/>\)](https://blog.orzsiyuan.com/tag/BZOJ/) [树状数组 \(<https://blog.orzsiyuan.com/tag/Binary-Indexed-Tree/>\)](https://blog.orzsiyuan.com/tag/Binary-Indexed-Tree/)[CDQ 分治 \(<https://blog.orzsiyuan.com/tag/CDQ-Divide-and-Conquer/>\)](https://blog.orzsiyuan.com/tag/CDQ-Divide-and-Conquer/)[UOJ \(<https://blog.orzsiyuan.com/tag/UOJ/>\)](https://blog.orzsiyuan.com/tag/UOJ/) [主席树 \(<https://blog.orzsiyuan.com/tag/Chairman-Tree/>\)](https://blog.orzsiyuan.com/tag/Chairman-Tree/)[高斯消元 \(<https://blog.orzsiyuan.com/tag/Gaussian-Elimination/>\)](https://blog.orzsiyuan.com/tag/Gaussian-Elimination/)[莫比乌斯反演 \(<https://blog.orzsiyuan.com/tag/Mobius-Inversion/>\)](https://blog.orzsiyuan.com/tag/Mobius-Inversion/)[AtCoder \(<https://blog.orzsiyuan.com/tag/AtCoder/>\)](https://blog.orzsiyuan.com/tag/AtCoder/)[多项式乘法 \(<https://blog.orzsiyuan.com/tag/%E5%8D%8F%E4%9A%A1%E5%BC%8F%E4%B9%98%E6%B3%95/>\)](https://blog.orzsiyuan.com/tag/%E5%8D%8F%E4%9A%A1%E5%BC%8F%E4%B9%98%E6%B3%95/)[并查集 \(<https://blog.orzsiyuan.com/tag/Union-Find-Set/>\)](https://blog.orzsiyuan.com/tag/Union-Find-Set/)[最大流 \(<https://blog.orzsiyuan.com/tag/Maximum-Flow/>\)](https://blog.orzsiyuan.com/tag/Maximum-Flow/)[费用流 \(<https://blog.orzsiyuan.com/tag/Minimum-Cost/>\)](https://blog.orzsiyuan.com/tag/Minimum-Cost/) [Splay \(<https://blog.orzsiyuan.com/tag/Splay/>\)](https://blog.orzsiyuan.com/tag/Splay/)[离线 \(<https://blog.orzsiyuan.com/tag/Off-Line/>\)](https://blog.orzsiyuan.com/tag/Off-Line/)[二分答案 \(<https://blog.orzsiyuan.com/tag/Binary-Search-Answer/>\)](https://blog.orzsiyuan.com/tag/Binary-Search-Answer/)[权值线段树 \(<https://blog.orzsiyuan.com/tag/Weight-Segment-Tree/>\)](https://blog.orzsiyuan.com/tag/Weight-Segment-Tree/)[容斥 \(<https://blog.orzsiyuan.com/tag/%E5%AE%9A%E6%96%A5/>\)](https://blog.orzsiyuan.com/tag/%E5%AE%9A%E6%96%A5/)[数论分块 \(<https://blog.orzsiyuan.com/tag/%E6%95%B0%E8%AE%BA%E5%88%86%E5%9D%97/>\)](https://blog.orzsiyuan.com/tag/%E6%95%B0%E8%AE%BA%E5%88%86%E5%9D%97/)[计算几何 \(<https://blog.orzsiyuan.com/tag/Geometry/>\)](https://blog.orzsiyuan.com/tag/Geometry/) [组合数学 \(<https://blog.orzsiyuan.com/tag/Combinatorics/>\)](https://blog.orzsiyuan.com/tag/Combinatorics/)[矩阵 \(<https://blog.orzsiyuan.com/tag/Matrix/>\)](https://blog.orzsiyuan.com/tag/Matrix/) [最小割 \(<https://blog.orzsiyuan.com/tag/Minimum-Cut/>\)](https://blog.orzsiyuan.com/tag/Minimum-Cut/)[随机化 \(<https://blog.orzsiyuan.com/tag/Randomization/>\)](https://blog.orzsiyuan.com/tag/Randomization/)[斜率优化 \(<https://blog.orzsiyuan.com/tag/Slope-Optimization/>\)](https://blog.orzsiyuan.com/tag/Slope-Optimization/) [NOI \(<https://blog.orzsiyuan.com/tag/NOI/>\)](https://blog.orzsiyuan.com/tag/NOI/)[概率期望 \(<https://blog.orzsiyuan.com/tag/%E6%A6%82%E7%8E%87%E6%9C%9F%E6%9C%9B/>\)](https://blog.orzsiyuan.com/tag/%E6%A6%82%E7%8E%87%E6%9C%9F%E6%9C%9B/)[后缀自动机 \(<https://blog.orzsiyuan.com/tag/%E5%90%8E%E7%BC%80%E8%87%AA%E5%8A%A8%E6%9C%BA/>\)](https://blog.orzsiyuan.com/tag/%E5%90%8E%E7%BC%80%E8%87%AA%E5%8A%A8%E6%9C%BA/)[位运算 \(<https://blog.orzsiyuan.com/tag/%E4%BD%8D%E8%BF%90%E7%AE%97/>\)](https://blog.orzsiyuan.com/tag/%E4%BD%8D%E8%BF%90%E7%AE%97/)

[生成函数](https://blog.orzsiyuan.com/tag/%E7%94%9F%E6%88%90%E5%87%BD%E6%95%B0/) (<https://blog.orzsiyuan.com/tag/%E7%94%9F%E6%88%90%E5%87%BD%E6%95%B0/>)[莫队](https://blog.orzsiyuan.com/tag/Mo-Algorithm/) (<https://blog.orzsiyuan.com/tag/Mo-Algorithm/>) [BJOI](https://blog.orzsiyuan.com/tag/BJOI/) (<https://blog.orzsiyuan.com/tag/BJOI/>)[线性基](https://blog.orzsiyuan.com/tag/Linear-Base/) (<https://blog.orzsiyuan.com/tag/Linear-Base/>) [分块](https://blog.orzsiyuan.com/tag/Partition/) (<https://blog.orzsiyuan.com/tag/Partition/>)[凸包](https://blog.orzsiyuan.com/tag/Convex-Hull/) (<https://blog.orzsiyuan.com/tag/Convex-Hull/>) [POJ](https://blog.orzsiyuan.com/tag/POJ/) (<https://blog.orzsiyuan.com/tag/POJ/>)[平衡树](https://blog.orzsiyuan.com/tag/Balanced-Tree/) (<https://blog.orzsiyuan.com/tag/Balanced-Tree/>)[线性筛](https://blog.orzsiyuan.com/tag/Euler-Sieve-Method/) (<https://blog.orzsiyuan.com/tag/Euler-Sieve-Method/>) [FWT](https://blog.orzsiyuan.com/tag/FWT/) (<https://blog.orzsiyuan.com/tag/FWT/>)[单调栈](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%B0%83%E6%A0%88/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%B0%83%E6%A0%88/>)[杜教筛](https://blog.orzsiyuan.com/tag/%E6%9D%9C%E6%95%99%E7%AD%9B/) (<https://blog.orzsiyuan.com/tag/%E6%9D%9C%E6%95%99%E7%AD%9B/>)[多项式指教函数](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%AF%86%E6%8C%87%E6%95%99%E7%AD%9B/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%AF%86%E6%8C%87%E6%95%99%E7%AD%9B/>)[行列式](https://blog.orzsiyuan.com/tag/Determinant/) (<https://blog.orzsiyuan.com/tag/Determinant/>)[欧拉函数](https://blog.orzsiyuan.com/tag/Euler-Function/) (<https://blog.orzsiyuan.com/tag/Euler-Function/>) [树形 DP](https://blog.orzsiyuan.com/tag/Tree-DP/) (<https://blog.orzsiyuan.com/tag/Tree-DP/>)[Two Pointers](https://blog.orzsiyuan.com/tag/Two-Pointers/) (<https://blog.orzsiyuan.com/tag/Two-Pointers/>)[模拟退火](https://blog.orzsiyuan.com/tag/Simulated-Annealing/) (<https://blog.orzsiyuan.com/tag/Simulated-Annealing/>) [NOIP](https://blog.orzsiyuan.com/tag/NOIP/) (<https://blog.orzsiyuan.com/tag/NOIP/>)[偏序](https://blog.orzsiyuan.com/tag/Partial-Order/) (<https://blog.orzsiyuan.com/tag/Partial-Order/>) [TJOI](https://blog.orzsiyuan.com/tag/TJOI/) (<https://blog.orzsiyuan.com/tag/TJOI/>)[整体二分](https://blog.orzsiyuan.com/tag/Binary-Search-Whole/) (<https://blog.orzsiyuan.com/tag/Binary-Search-Whole/>) [ZJOI](https://blog.orzsiyuan.com/tag/ZJOI/) (<https://blog.orzsiyuan.com/tag/ZJOI/>)[积性函数](https://blog.orzsiyuan.com/tag/Multiplicative-Function/) (<https://blog.orzsiyuan.com/tag/Multiplicative-Function/>)[RMQ](https://blog.orzsiyuan.com/tag/RMQ/) (<https://blog.orzsiyuan.com/tag/RMQ/>)[决策单调性](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%86%B3%E7%AD%96%E5%8D%95%E8%AD%83%E6%80%A7/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%86%B3%E7%AD%96%E5%8D%95%E8%AD%83%E6%80%A7/>)[二分](https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%88%86/) (<https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%88%86/>)[多项式求逆](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%AF%86/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%AF%86/>)[多项式开根](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/>)[数学归纳法](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/>)[多项式自然对数](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/>)[多项式快速幂](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/) (<https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%8A%A1%E5%BC%8F/>)[最小圆覆盖](https://blog.orzsiyuan.com/tag/Smallest-Encoding-Circle/) (<https://blog.orzsiyuan.com/tag/Smallest-Encoding-Circle/>)[BSGS](https://blog.orzsiyuan.com/tag/BSGS/) (<https://blog.orzsiyuan.com/tag/BSGS/>) [可持久化](https://blog.orzsiyuan.com/tag/Persistence/) (<https://blog.orzsiyuan.com/tag/Persistence/>)[拉格朗日插值](https://blog.orzsiyuan.com/tag/Lagrange-Interpolation/) (<https://blog.orzsiyuan.com/tag/Lagrange-Interpolation/>)[同余](https://blog.orzsiyuan.com/tag/Congruence/) (<https://blog.orzsiyuan.com/tag/Congruence/>)[线性同余方程](https://blog.orzsiyuan.com/tag/Linear-Congruence-Theorem/) (<https://blog.orzsiyuan.com/tag/Linear-Congruence-Theorem/>)[exGCD](https://blog.orzsiyuan.com/tag/exGCD/) (<https://blog.orzsiyuan.com/tag/exGCD/>) [CRT](https://blog.orzsiyuan.com/tag/CRT/) (<https://blog.orzsiyuan.com/tag/CRT/>)[exCRT](https://blog.orzsiyuan.com/tag/exCRT/) (<https://blog.orzsiyuan.com/tag/exCRT/>) [逆矩阵](https://blog.orzsiyuan.com/tag/Matrix-Inversion/) (<https://blog.orzsiyuan.com/tag/Matrix-Inversion/>)[最短路](https://blog.orzsiyuan.com/tag/Shortest-Path/) (<https://blog.orzsiyuan.com/tag/Shortest-Path/>) [Floyd](https://blog.orzsiyuan.com/tag/Floyd/) (<https://blog.orzsiyuan.com/tag/Floyd/>)[类欧几里德算法](https://blog.orzsiyuan.com/tag/Similar-Euclidean-Algorithm/) (<https://blog.orzsiyuan.com/tag/Similar-Euclidean-Algorithm/>)[叉积](https://blog.orzsiyuan.com/tag/Cross-Product/) (<https://blog.orzsiyuan.com/tag/Cross-Product/>) [HEOI](https://blog.orzsiyuan.com/tag/HEOI/) (<https://blog.orzsiyuan.com/tag/HEOI/>)[最大子段和](https://blog.orzsiyuan.com/tag/Maximum-Interval-Sum/) (<https://blog.orzsiyuan.com/tag/Maximum-Interval-Sum/>)

- [递推 \(https://blog.orzsiyuan.com/tag/Recursion/\)](https://blog.orzsiyuan.com/tag/Recursion/) [缩点 \(https://blog.orzsiyuan.com/tag/Shrinking-Point/\)](https://blog.orzsiyuan.com/tag/Shrinking-Point/)
- [单调队列 \(https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%B0%83%E9%98%9F%E5%88%97/\)](https://blog.orzsiyuan.com/tag/%E5%8D%95%E8%B0%83%E9%98%9F%E5%88%97/)
- [重心 \(https://blog.orzsiyuan.com/tag/%E9%87%8D%E5%BF%83/\)](https://blog.orzsiyuan.com/tag/%E9%87%8D%E5%BF%83/)
- [上下界网络流 \(https://blog.orzsiyuan.com/tag/%E4%B8%8A%E4%B8%8B%E7%95%8C%E7%BD%91%E7%BB%9C%E6%BC%A0/\)](https://blog.orzsiyuan.com/tag/%E4%B8%8A%E4%B8%8B%E7%95%8C%E7%BD%91%E7%BB%9C%E6%BC%A0/)
- [AHOI \(https://blog.orzsiyuan.com/tag/AHOI/\)](https://blog.orzsiyuan.com/tag/AHOI/)
- [倍增 \(https://blog.orzsiyuan.com/tag/%E5%80%8D%E5%A2%9E/\)](https://blog.orzsiyuan.com/tag/%E5%80%8D%E5%A2%9E/)
- [二分图 \(https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%88%86%E5%9B%BE/\)](https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%88%86%E5%9B%BE/)
- [差分 \(https://blog.orzsiyuan.com/tag/%E5%B7%AE%E5%88%86/\)](https://blog.orzsiyuan.com/tag/%E5%B7%AE%E5%88%86/)
- [Dirichlet 卷积 \(https://blog.orzsiyuan.com/tag/Dirichlet-%E5%8D%87%E7%A7%AF/\)](https://blog.orzsiyuan.com/tag/Dirichlet-%E5%8D%87%E7%A7%AF/)
- [多省联考 \(https://blog.orzsiyuan.com/tag/%E5%A4%9A%E7%9C%81%E8%81%94%E8%80%83/\)](https://blog.orzsiyuan.com/tag/%E5%A4%9A%E7%9C%81%E8%81%94%E8%80%83/)
- [优先队列 \(https://blog.orzsiyuan.com/tag/%E4%BC%98%E5%85%88%E9%98%9F%E5%88%97/\)](https://blog.orzsiyuan.com/tag/%E4%BC%98%E5%85%88%E9%98%9F%E5%88%97/)
- [启发式合并 \(https://blog.orzsiyuan.com/tag/%E5%90%AF%E5%8F%91%E5%BC%8F%E5%90%88%E5%B9%B6/\)](https://blog.orzsiyuan.com/tag/%E5%90%AF%E5%8F%91%E5%BC%8F%E5%90%88%E5%B9%B6/)
- [Trie \(https://blog.orzsiyuan.com/tag/Trie/\)](https://blog.orzsiyuan.com/tag/Trie/) [Tarjan \(https://blog.orzsiyuan.com/tag/Tarjan/\)](https://blog.orzsiyuan.com/tag/Tarjan/)
- [线段树合并 \(https://blog.orzsiyuan.com/tag/%E7%BA%BF%E6%AE%B5%E6%A0%91%E5%90%88%E5%B9%B6/\)](https://blog.orzsiyuan.com/tag/%E7%BA%BF%E6%AE%B5%E6%A0%91%E5%90%88%E5%B9%B6/)
- [SDOI \(https://blog.orzsiyuan.com/tag/SDOI/\)](https://blog.orzsiyuan.com/tag/SDOI/) [交互 \(https://blog.orzsiyuan.com/tag/%E4%BA%A4%E4%BA%92/\)](https://blog.orzsiyuan.com/tag/%E4%BA%A4%E4%BA%92/)
- [欧拉路径 \(https://blog.orzsiyuan.com/tag/%E6%AC%A7%E6%8B%89%E8%B7%AF%E5%BE%84/\)](https://blog.orzsiyuan.com/tag/%E6%AC%A7%E6%8B%89%E8%B7%AF%E5%BE%84/)
- [多项式除法 \(https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E9%99%A4%E6%B3%95/\)](https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E9%99%A4%E6%B3%95/)
- [多项式取模 \(https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E5%8F%96%E6%A8%A1/\)](https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E5%8F%96%E6%A8%A1/)
- [多项式三角函数 \(https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E4%B8%89%E8%A7%92%E5%8F%96/\)](https://blog.orzsiyuan.com/tag/%E5%A4%9A%E9%A1%B9%E5%BC%8F%E4%B8%89%E8%A7%92%E5%8F%96/)
- [通项公式 \(https://blog.orzsiyuan.com/tag/%E9%80%9A%E9%A1%B9%E5%85%AC%E5%BC%8F/\)](https://blog.orzsiyuan.com/tag/%E9%80%9A%E9%A1%B9%E5%85%AC%E5%BC%8F/)
- [欧拉定理 \(https://blog.orzsiyuan.com/tag/Euler-Theorem/\)](https://blog.orzsiyuan.com/tag/Euler-Theorem/)
- [Kruskal 重构树 \(https://blog.orzsiyuan.com/tag/Extended-Kruskal/\)](https://blog.orzsiyuan.com/tag/Extended-Kruskal/)
- [生成树 \(https://blog.orzsiyuan.com/tag/Spanning-Tree/\)](https://blog.orzsiyuan.com/tag/Spanning-Tree/)
- [矩阵树定理 \(https://blog.orzsiyuan.com/tag/Matrix-Tree-Theorem/\)](https://blog.orzsiyuan.com/tag/Matrix-Tree-Theorem/) [LIS \(https://blog.orzsiyuan.com/tag/LIS/\)](https://blog.orzsiyuan.com/tag/LIS/)
- [曼哈顿距离 \(https://blog.orzsiyuan.com/tag/Manhattan-Distance/\)](https://blog.orzsiyuan.com/tag/Manhattan-Distance/)
- [切比雪夫距离 \(https://blog.orzsiyuan.com/tag/Chebyshev-Distance/\)](https://blog.orzsiyuan.com/tag/Chebyshev-Distance/)
- [CQOI \(https://blog.orzsiyuan.com/tag/CQOI/\)](https://blog.orzsiyuan.com/tag/CQOI/) [树套树 \(https://blog.orzsiyuan.com/tag/Tree-Nested-Tree/\)](https://blog.orzsiyuan.com/tag/Tree-Nested-Tree/)
- [LCA \(https://blog.orzsiyuan.com/tag/LCA/\)](https://blog.orzsiyuan.com/tag/LCA/) [质数 \(https://blog.orzsiyuan.com/tag/Prime-Number/\)](https://blog.orzsiyuan.com/tag/Prime-Number/)
- [矩阵快速幂 \(https://blog.orzsiyuan.com/tag/Matrix-Fast-Power/\)](https://blog.orzsiyuan.com/tag/Matrix-Fast-Power/)
- [FHQ Treap \(https://blog.orzsiyuan.com/tag/FHQ-Treap/\)](https://blog.orzsiyuan.com/tag/FHQ-Treap/) [POI \(https://blog.orzsiyuan.com/tag/POI/\)](https://blog.orzsiyuan.com/tag/POI/)
- [Kruskal \(https://blog.orzsiyuan.com/tag/Kruskal/\)](https://blog.orzsiyuan.com/tag/Kruskal/) [HAOI \(https://blog.orzsiyuan.com/tag/HAOI/\)](https://blog.orzsiyuan.com/tag/HAOI/)
- [四边形不等式 \(https://blog.orzsiyuan.com/tag/%E5%9B%9B%E8%BE%B9%E5%BD%A2%E4%B8%8D%E7%AD%89%E5%8B%95/\)](https://blog.orzsiyuan.com/tag/%E5%9B%9B%E8%BE%B9%E5%BD%A2%E4%B8%8D%E7%AD%89%E5%8B%95/)
- [点分治 \(https://blog.orzsiyuan.com/tag/%E7%82%B9%E5%88%86%E6%B2%BB/\)](https://blog.orzsiyuan.com/tag/%E7%82%B9%E5%88%86%E6%B2%BB/)
- [拓扑排序 \(https://blog.orzsiyuan.com/tag/%E6%8B%93%E6%89%91%E6%8E%92%E5%BA%8F/\)](https://blog.orzsiyuan.com/tag/%E6%8B%93%E6%89%91%E6%8E%92%E5%BA%8F/)
- [CodeChef \(https://blog.orzsiyuan.com/tag/CodeChef/\)](https://blog.orzsiyuan.com/tag/CodeChef/)

[最小流 \(https://blog.orzsiyuan.com/tag/%E6%9C%80%E5%B0%8F%E6%B5%81/\)](https://blog.orzsiyuan.com/tag/%E6%9C%80%E5%B0%8F%E6%B5%81/)

[匈牙利算法 \(https://blog.orzsiyuan.com/tag/%E5%8C%88%E7%89%99%E5%88%A9%E7%AE%97%E6%B3%95/\)](https://blog.orzsiyuan.com/tag/%E5%8C%88%E7%89%99%E5%88%A9%E7%AE%97%E6%B3%95/)

[扫描线 \(https://blog.orzsiyuan.com/tag/%E6%89%AB%E6%8F%8F%E7%BA%BF/\)](https://blog.orzsiyuan.com/tag/%E6%89%AB%E6%8F%8F%E7%BA%BF/)

[CEOI \(https://blog.orzsiyuan.com/tag/CEOI/\)](https://blog.orzsiyuan.com/tag/CEOI/)

[长链剖分 \(https://blog.orzsiyuan.com/tag/%E9%95%BF%E9%93%BE%E5%89%96%E5%88%86/\)](https://blog.orzsiyuan.com/tag/%E9%95%BF%E9%93%BE%E5%89%96%E5%88%86/)

[GXOI \(https://blog.orzsiyuan.com/tag/GXOI/\)](https://blog.orzsiyuan.com/tag/GXOI/) [GZOI \(https://blog.orzsiyuan.com/tag/GZOI/\)](https://blog.orzsiyuan.com/tag/GZOI/)

[USACO \(https://blog.orzsiyuan.com/tag/USACO/\)](https://blog.orzsiyuan.com/tag/USACO/)

[AC 自动机 \(https://blog.orzsiyuan.com/tag/AC-%E8%87%AA%E5%8A%A8%E6%9C%BA/\)](https://blog.orzsiyuan.com/tag/AC-%E8%87%AA%E5%8A%A8%E6%9C%BA/)

[KMP \(https://blog.orzsiyuan.com/tag/KMP/\)](https://blog.orzsiyuan.com/tag/KMP/) [暴力 \(https://blog.orzsiyuan.com/tag/%E6%9A%B4%E5%8A%9B/\)](https://blog.orzsiyuan.com/tag/%E6%9A%B4%E5%8A%9B/)

[CTSC \(https://blog.orzsiyuan.com/tag/CTSC/\)](https://blog.orzsiyuan.com/tag/CTSC/)

[扩展欧拉定理 \(https://blog.orzsiyuan.com/tag/%E6%89%A9%E5%B1%95%E6%AC%A7%E6%8B%89%E5%AE%9A%E7%90%8D/\)](https://blog.orzsiyuan.com/tag/%E6%89%A9%E5%B1%95%E6%AC%A7%E6%8B%89%E5%AE%9A%E7%90%8D/)

[牛顿迭代法 \(https://blog.orzsiyuan.com/tag/%E7%89%9B%E9%A1%BF%E8%BF%AD%E4%BB%A3%E6%B3%95/\)](https://blog.orzsiyuan.com/tag/%E7%89%9B%E9%A1%BF%E8%BF%AD%E4%BB%A3%E6%B3%95/)

[泰勒公式 \(https://blog.orzsiyuan.com/tag/%E6%B3%B0%E5%8B%92%E5%85%AC%E5%BC%8F/\)](https://blog.orzsiyuan.com/tag/%E6%B3%B0%E5%8B%92%E5%85%AC%E5%BC%8F/)

[多项式反三角函数 \(https://blog.orzsiyuan.com/tag/%E5%90%8D%E5%8F%8D%E4%B8%89%E8%AF%8D/\)](https://blog.orzsiyuan.com/tag/%E5%90%8D%E5%8F%8D%E4%B8%89%E8%AF%8D/)

[背包 \(https://blog.orzsiyuan.com/tag/%E8%83%8C%E5%8C%85/\)](https://blog.orzsiyuan.com/tag/%E8%83%8C%E5%8C%85/)

[区间 DP \(https://blog.orzsiyuan.com/tag/%E5%8C%BA%E9%97%B4-DP/\)](https://blog.orzsiyuan.com/tag/%E5%8C%BA%E9%97%B4-DP/)

[HNOI \(https://blog.orzsiyuan.com/tag/HNOI/\)](https://blog.orzsiyuan.com/tag/HNOI/) [WC \(https://blog.orzsiyuan.com/tag/WC/\)](https://blog.orzsiyuan.com/tag/WC/)

[鸽巢原理 \(https://blog.orzsiyuan.com/tag/%E9%8B%BD%E5%B7%A2%E5%8E%9F%E7%90%86/\)](https://blog.orzsiyuan.com/tag/%E9%8B%BD%E5%B7%A2%E5%8E%9F%E7%90%86/)

[树链剖分 \(https://blog.orzsiyuan.com/tag/%E6%A0%91%E9%93%BE%E5%89%96%E5%88%86/\)](https://blog.orzsiyuan.com/tag/%E6%A0%91%E9%93%BE%E5%89%96%E5%88%86/)

[第二类斯特林数 \(https://blog.orzsiyuan.com/tag/%E7%AC%AC%E4%BA%8C%E7%B1%BB%E6%96%AF%E7%89%B9%E6%96%AF/\)](https://blog.orzsiyuan.com/tag/%E7%AC%AC%E4%BA%8C%E7%B1%BB%E6%96%AF%E7%89%B9%E6%96%AF/)

[二项式定理 \(https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%BC%8F%E5%AE%9A%E7%90%86/\)](https://blog.orzsiyuan.com/tag/%E4%BA%8C%E5%BC%8F%E5%AE%9A%E7%90%86/)

© 2020 Copyright 浙ICP备19008446号-1 (<http://www.beian.miit.gov.cn>)