

## 标签 最大子段和 下的文章

🏠 首页 (<https://blog.orzsiyuan.com/>) / 最大子段和

「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

「NOI 2005」维修数列 (<https://blog.orzsiyuan.com/archives/NOI-2005-Maintain-Sequence/>)


题目链接: BZOJ 1500 (<https://lydsy.com/JudgeOnline/problem.php?id=1500>)


请写一个程序, 要求维护一个数列。一共有  $m$  个操作, 支持以下 6 种操作:

操作	输入格式	说明
插入	INSERT pos tot c[1] c[2] ... c[tot]	在当前数列的第 $pos$ 个数字后插入 $tot$ 个数字: $c_1, c_2, \dots, c_{tot}$ ; 若在数列首插入, 则 $pos$ 为 0。
删除	DELETE pos tot	从当前数列的第 $pos$ 个数字开始连续删除 $tot$ 个数字。
修改	MAKE-SAME pos tot c	将当前数列的第 $pos$ 个数字开始的连续 $tot$ 个数字统一修改为 $c$ 。

操作	输入格式	说明
翻转	REVERSE pos tot	取出从当前数列的第 $pos$ 个数字开始的 $tot$ 个数字，翻转后放入原来的位置。
求和	GET-SUM pos tot	计算从当前数列的第 $pos$ 个数字开始的 $tot$ 个数字的和并输出。
求和最大的子列	MAX-SUM	求出当前数列中和最大的一段非空子列，并输出最大和。

数据范围：  $1 \leq m \leq 2 \times 10^4$ ，任何时刻数列中最多含有  $5 \times 10^5$ ，数列中任何一个数字均在  $[-10^3, 10^3]$ ，插入的数字总数不超过  $4 \times 10^6$  个。

 Siyuan (<https://blog.orzsiyuan.com/author/1/>)

 2019 年 03 月 15 日



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2019-  843

博客信息

 文章数目	187
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运行天数

1年25天

最后活动

4 个月前

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