

The background is a soft-focus illustration of a young woman with brown hair and red eyes, wearing a traditional Japanese kimono with a yellow and orange floral pattern. She is holding a small book or camera in her hands. The scene is surrounded by falling autumn leaves in shades of red, orange, and yellow. Several Polaroid-style photographs are scattered around her, showing various scenes. The overall atmosphere is nostalgic and artistic.

# 毒瘤乱讲

东营市胜利第一中学

AH

嘤嘤嘤

给你两个长为n的序列A和B  
求下式mod 469762049（原根为3）的值

$$\sum_{i=1}^n \sum_{j=i}^n \max\{A_i \dots A_j\} \min\{A_i \dots A_j\} \sum_{k=i}^j B_k$$

出现的数均为不超过2e5的非负整数  
提示：此题并不难





The background features a soft-focus illustration of a young woman with long brown hair, wearing a traditional Japanese kimono with a yellow and orange floral pattern. She is holding a small white object in her right hand and a book or tablet in her left. The scene is surrounded by falling autumn leaves in shades of red, orange, and yellow. Several small, tilted photographs are scattered around her, showing various scenes. The overall tone is gentle and nostalgic.

嘤嘤嘤

其实模数是骗人去想多项式的  
其实这题跟多项式一点关系都没有  
其实正解是分治



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我们将区间分为 $[l, mid], [mid+1, r]$

统计跨区间的贡献

我们发现 $[mid+1, r]$ 前缀min和前缀max都有单调性

于是我们开三个指针

$ct1: [mid \rightarrow l]$ , 维护 $maxA[ct1, mid], minA[ct1, mid]$

$ct2, ct3: [mid+1 \rightarrow r]$ , 维护 $maxA[mid+1, ct2], minA[mid+1, ct3]$





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每移动一次 $ct1, ct2$ 扫到 $\max A2 \leq \max A1$ 的最右侧,  $ct3$ 同理

这样贡献就被分为了三段区间

$[\min1, \max1], [\min1, \max2] || [\min2, \max1], [\min2, \max2]$

我们分别维护 $\{1, \min2, \max2, \min2 * \max2\} * B$ 的前缀和

然后就做完了

复杂度 $O(n \log n)$

常数有点大, 但不需要卡常 (因为出题人太懒没有出数据)

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嚶嚶嚶上树辣

统计树上全部简单路径的贡献，对19260817取模  
数值 $\leq 2e5$

$$\sum_{i=1}^n \sum_{j=i}^n \max\{A_i \dots A_j\} \min\{A_i \dots A_j\} \sum_{k=i}^j B_k$$





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既然上面是序列分治那么这里就上点分治吧

点分治要合并答案和查询

我们发现这是个带插入的二维数点

可以树状数组套权值线段树

复杂度 $O(n \log n \log^2 |A|)$

然后TLE



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我们发现要插入的点是可以离线下来的  
这样我们根据min或max排序，对另一维开两棵线段树  
然后统计  
发现多算了同一条链上的，把贡献容斥掉  
复杂度是 $O(n \log n (\log n + \log |A|))$ 的  
可以通过本题（依然没有数据）