

标签 欧拉函数 下的文章

🏠 首页 (<https://blog.orzsiyuan.com/>) / 欧拉函数

[Luogu 5106] dkw 的 lcm (<https://blog.orzsiyuan.com/archives/Luogu-5106-Dkw-LCM/>)

题目链接: Luogu 5106 (<https://www.luogu.org/problemnew/show/P5106>)

善良的 dkw 决定直接告诉你题面:

$$\prod_{i_1=1}^n \prod_{i_2=1}^n \cdots \prod_{i_k=1}^n \varphi(\text{lcm}(i_1, i_2, \dots, i_k))$$

请你求上述式子, 答案对 $10^9 + 7$ 取模。

其中 $\text{lcm}(i_1, i_2, \dots, i_k)$ 表示这 k 个数的最小公倍数。特别地, 一个数的 lcm 是自身。

数据范围: $1 \leq n, k \leq 10^6$ 。

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

[Codeforces 594D] REQ (<https://blog.orzsiyuan.com/archives/Codeforces-594D-REQ/>)

题目链接: Codeforces 594D (<https://codeforces.com/contest/594/problem/D/>)

今天的数学课上, 老师告诉 Vovochka 正整数的欧拉函数 $\varphi(n)$ 是计算小于等于 n 且与 n 互质的正整数的函数, 1 和任意正整数互质所以 $\varphi(1) = 1$ 。

现在老师给了 Vovochka 一个数列 a_1, a_2, \dots, a_n , 要求回答 q 个询问 l_i, r_i , 计算 $\varphi\left(\prod_{i=l_i}^{r_i} a_i\right)$ 的值, 答案对 $10^9 + 7$ 取模。这个问题对二年级学生来说太难了, 所以你决定帮助 Vovochka。

数据范围: $1 \leq n, q \leq 2 \times 10^5$, $1 \leq a_i \leq 10^6$ 。

👤 Siyuan (<https://blog.orzsiyuan.com/author/1/>) ⌚ 2019 年 02 月 02 日

「算法笔记」欧拉函数 (https://blog.orzsiyuan.com/archives/Euler-Function/)

✓ 欧拉函数是数论中的一个重要积性函数。

👤 Siyuan (https://blog.orzsiyuan.com/author/1/) ⌚ 2019 年 01 月 28 日



热门文章

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

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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

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