

The 3rd Universal Cup. Stage 28: Haidian Huangzhuang □□

2025-02-02 07:36:34 By [Qingyu](#) ✨

A.

$O(1)$

B.

3sum FFT 3sum $n \times n$ $n/B \times n/B$ $B \times B$ $O(n/B)$ $O(B)$ $O(n\sqrt{n \log n})$

6

D 2

□ IDM Problem □ CountDistinct □ Nearly Optimal Internal Dictionary Matching
 □ v_t □ t □ s □ $0 \leq t \leq n - 1$ □ $v_t \in \{0, 1\}$ □ $s[l, r]$ □ v □
 □ trie □ trie □ SAM □ $f_u \circ u$ □ v □ trie □ $s[l, r]$ □ v □ v □ trie □
 □

$$\sum_u f_u - \sum_u (u - 1) f_u$$

$\square s[1, r] \square \text{last} \square l \square O(n \log^2 n + q \log n) \square$

$\square \square \square \square \square \square \square O(n \log^2 n + q \log n) \square \square n, q \square \square \square \square \square \square \square O\left(\frac{n \log^2 n}{\log \log n}\right) \square$

E.

□□□□□ 1 □□□□

0101**00001111**0101**0001110111100010101** □□

10100001011110100010111011100101010

0 1 2 n

□□□□□□□ $O((n + q) \log n)$ □

F. Trash Problem

2 × 2 1 1

$\square [l, r] \square 1 \square [1, r] \square 1 \square [1, l-1] \square 1 \square$
 $\square r \square O(1) \square O(n^3)$

Submit

 English ▾

QOJ.ac | [QOJ 4.5.21.0.dev](#) | Based on UOJ - OpenSource Project

Made with ❤ by [Qingyu✨](#)

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