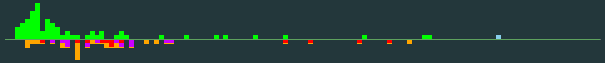
E: Exhausted Economist

Problem author: Mike de Vries



Problem: Given a list of prices that each person is willing to pay for your product, find your maximal revenue.

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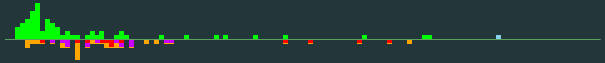

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Observation: You should always ask a price in the list.

- Otherwise, you can increase the price without losing buyers.

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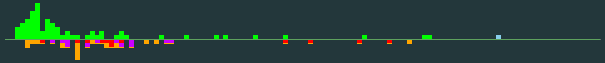

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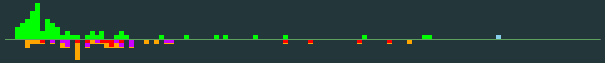

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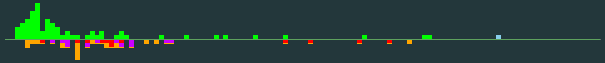

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Asking p_i gives revenue $i \cdot p_i$, where p_i is the i-th price in the sorted list.

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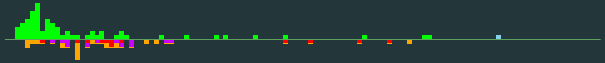

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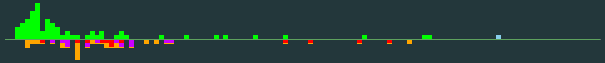

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Running time: $\mathcal{O}(n \log n)$.

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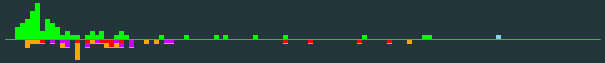

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Statistics: 106 submissions, 66 accepted, 1 unknown