L: Lopsided Lineup

Problem Author: Jorke de Vlas

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Statistics: 12 submissions, 7 accepted, 3 unknown

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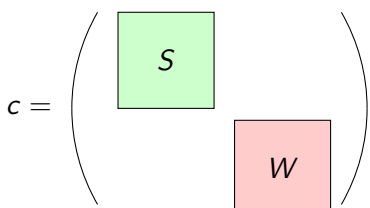

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$$c = \begin{pmatrix} S & X \\ X & W \end{pmatrix}$$

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$$c = \begin{pmatrix} S & X \\ X & W \end{pmatrix}$$

$$\text{score} = \frac{1}{2}((S+X)-(W+X))$$

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- The score of each team is the sum of its players' row sums.

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$$\text{score} = \frac{1}{2}((S+X)-(W+X))$$

- The score of each team is the sum of its players' row sums.
- If you take any *other* strong team, you can reorder the matrix c so that your chosen team is the first $n/2$. That does not change the row sums!

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- **Solution:** for each player compute its strength (i.e. the sum of its row). Take the $n/2$ strongest players for the strong team, and the others for the weak team.
- Complexity: $\mathcal{O}(n^2)$.