Instruction

Put the elements into a 5 × n grid.

Find the median of each column.

Within each column move the small elements in the top, large elements in the bottom, and median to the middle.

Find the median of medians.

Move the column(s) with small medians to the left, large medians to the right, and the median of medians to the middle.

Partition using median of medians as pivot.

Recursively call algorithm on proper side.

Comparisons
Instruction

- Put the elements into a $5 \times \frac{n}{5}$ grid.
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Comparisons

$\frac{n}{5}10 = 2n$
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Comparisons

\[ \frac{n}{5}10 = 2n \]
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Comparisons

- $\frac{n}{5} \cdot 10 = 2n$
- $T(\frac{n}{5})$
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\frac{n}{5}10 = 2n
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\[
T\left(\frac{n}{5}\right)
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Comparisons

- $\frac{n}{5}10 = 2n$
- $T\left(\frac{n}{5}\right)$
- $n - 1$
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Comparisons

$\frac{n}{5} 10 = 2n$

$T(\frac{n}{5})$

$n - 1$
Instruction

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Comparisons

$\frac{n}{5} \times 10 = 2n$

$T\left(\frac{n}{5}\right)$

$n - 1$

$T\left(\frac{7n}{10}\right)$