



DP - Part V

Complete Course on Algorithm for GATE - CS & IT

$$C + T(n/2)$$

i/p: Sorted array of ~~n~~-distinct integers.

o/p: Find any element $a[i]$, $a[i] == i$

TC? [Best Algo
worst case time]

i/p: $A \begin{bmatrix} -100 & -90 & -80 & -50 & -40 & -3 & -2 & 4 & 6 & 10 & 15 & 50 & 20 & 80 & 150 & 200 & 300 \\ 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \end{bmatrix}$

LS

$O(n) [wc]$

BS

$O(\log n) [wc]$

Algo

if ($P < V$)

go-left

else

go-right

not sorted Bsp

Sorted, ~~dist~~ Bsp

W. H. A. N. Y

Thanks All

Two parallel diagonal lines drawn in yellow, extending from the bottom left towards the top right, positioned below the 'Thanks All' text.

