

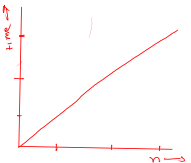
$$x = \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \end{pmatrix} \rightarrow \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \end{pmatrix}$$

$2^3 + 2^2 + 2^1 + 2^0 = 15$
 $|15| = 3 \quad 1 \quad 1$
 $|2-1| = 1$
 $4 \quad 1$
 $1 \quad 1$
 $2 \quad 5$
 $5 \quad 2$

$\hat{C}(3, 4, 1)$
 $x = 1$ $x = 1$
 100000

$[\boxed{1}, 3, 2, 5, 7] = 8 \text{ sec}$

1 sec

[illegible]

$\boxed{ms} \Rightarrow \boxed{1, 2, 5}$ $\text{walk} \rightarrow \text{sum of the array}$
 $\boxed{\text{sum} = 6 \times 10}$ $\boxed{3 \text{ of } 5}$ $\boxed{3 \text{ of } 2}$
 $\boxed{10}$ $\text{time complexity} \rightarrow \text{Arithmetic}$ $2 \text{ times } \times 10^2$

$$\begin{cases} n=9 \\ n=9 \end{cases}$$

$\rightarrow [1]$

[illegible]

HW → Check TC

Space $\rightarrow O(1)$

50

50

$\times n$

log

10⁶

time \uparrow

$\uparrow \text{time} \propto n^2 \uparrow$

$\boxed{\text{time} \propto n^2} \rightarrow O(n^2) \leftarrow$

$\rightarrow [1, 3, 4, 7, 0]$ \xrightarrow{w}

$$Sum = 0 \leftarrow \text{cost}(\text{tree}) \leq p(i)$$

a. 

\Rightarrow positive sum

مجلس



Handwritten notes on a grid background:

- Top left: $C = 4 \times 3 \times 2$
- Top middle: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$
- Top right: 10^3
- Middle left: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$
- Middle right: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$
- Bottom left: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$
- Bottom middle: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$
- Bottom right: $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \end{bmatrix}$