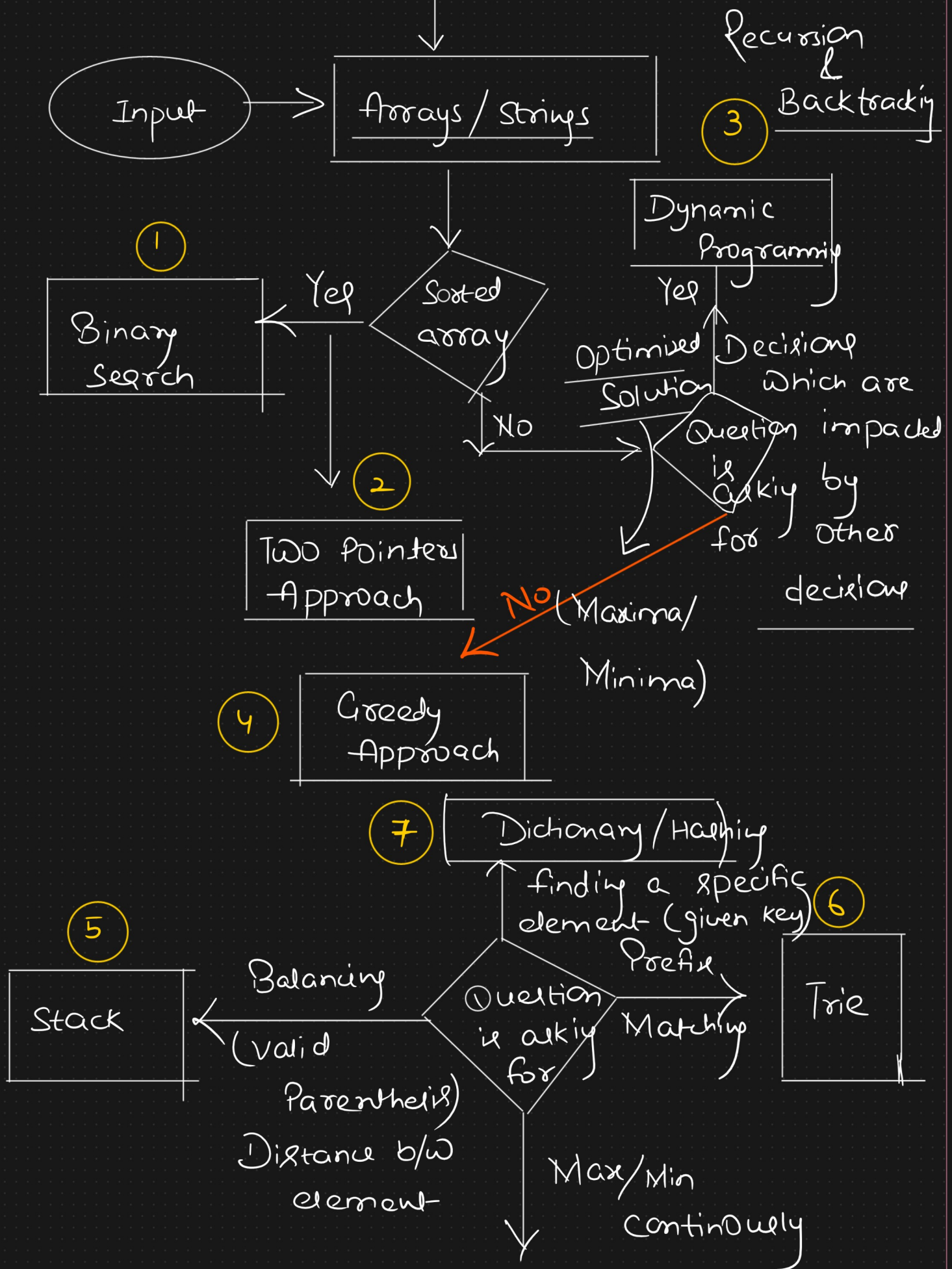


# Leetcode Interview Questions



8

Heap  
Data Structure

Max heap

Min heap

Input → Tree (Binary)

11

DFS

No

Question  
is asking  
for

Subarrays  
or  
Substrings

9

Sliding  
Window

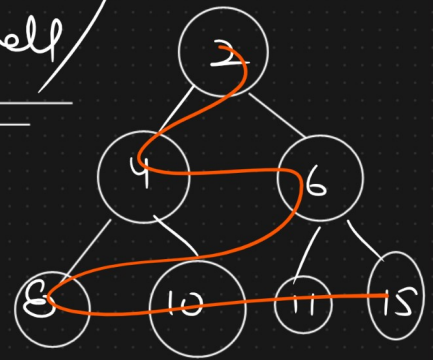
Yes Specific Level /

10



Depth

BFS



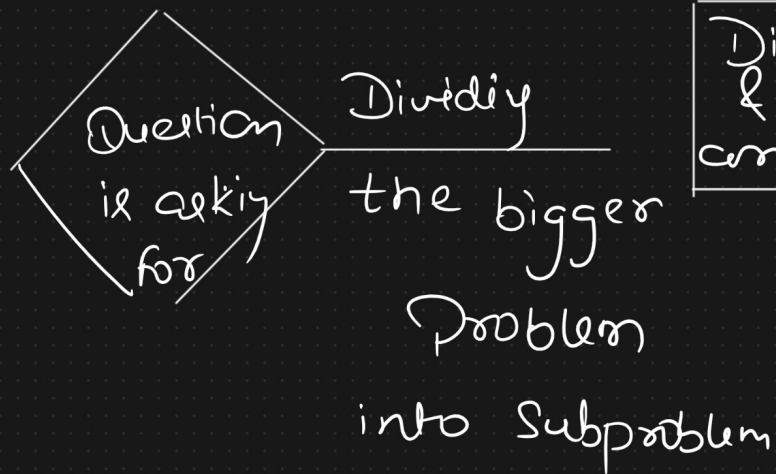
Level Order  
Traversal

Yes

Finding  
out shortest  
distance

Question  
is asking  
for

11



Ideal case  $\rightarrow$  Time  $\downarrow$  Space  $\downarrow$

Trade off  $\rightarrow$  Time  $\downarrow$  Space  $\uparrow$

$T(n)$

fact(n):

Recursive code — Recurrence Relation

① Base case condition

$n \leq 1$

$\rightarrow$  return 1

②  $n > 1$

$\rightarrow$  Repetitive task

return  $n \times$  fact(n-1),  $T(n-1) + c$



$$\begin{aligned}
 5! &\rightarrow 5 \times 4! \\
 &\rightarrow 4 \times 3! \\
 &\rightarrow 3 \times 2! \\
 &\rightarrow 2 \times 1! \\
 &\rightarrow 1
 \end{aligned}$$

## Recurrence Relation

$$T(n) = \begin{cases} c & n \leq 1 \\ T(n-1) + c & n > 1 \end{cases}$$

$$T(n) = O(n)$$