

DIVIDE AND CONQUER ALGORITHM

2023-24

Time complexity for recurrence relation $T(n)=2 T(n/2) + n$ is _____.

Analyze the time complexity of quick sort algorithm for best case and worst case using recurrence relations. [5]

Write the recurrence relation for computing the time complexity of "Towers of Hanoi" problem. Also solve the recurrence relation to get the time complexity. [7]

2022-23

Best case time complexity of Binary search algorithm is _____

(a) Write down an algorithm of Quick Sort. [5]

(b) Derive the best, worst and average case time complexity of your algorithm. [2+3+5]