

Algorithms Design and Analysis [ETCS-301]

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Even numbered students will attempt even numbered questions and odd numbered students will attempt odd numbered questions.

- Q1. Prove that $\lg n! = O(n \lg n)$
- Q2. Find the solution of $T(n) = 3T(\sqrt[3]{n}) + \lg_3 n$
- Q3. Find the cost to multiply the matrices whose dimensions are given as 15,5,10,2,5.
- Q4. Find the maximum length subsequence of the two sequences $\langle 00110101 \rangle$ and $\langle 101100110 \rangle$



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- Q1. Prove that $n! = O(n^n)$
- Q2. Find the solution of $T(n) = 2T(\frac{n}{2}) + n \lg n$
- Q3. Drive the recursive formula to find the cost of multiplication of n matrices.
- Q4. Drive the recursive formula to find the maximum length of common sequence of two sequences.



Thank you

Please send your feedback or any queries to akyadav1@amity.edu,
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