

Assignment - 2

1. Given two matrices A and B of size $n \times n$. Multiply these matrices using the divide-and-conquer technique (Create 8 sub-problems). While writing the code, do not separately create four matrices from A as well as B . Use the indices for this purpose.
2. Write a program to find a sub-array of an array (having n elements) with maximum sum in following time complexities –
 - Time complexity = $\Theta(n^3)$
 - Time complexity = $\Theta(n^2)$
 - Time complexity = $\Theta(n \log n)$