



Analysis of D&C algorithm

$$T(n) = 8T(n/2) + \Theta(n^2)$$

submatrices

submatrix size

work adding
submatrices

$$n^{\log_b a} = n^{\log_2 8} = n^3 \Rightarrow \text{CASE 1} \Rightarrow T(n) = \Theta(n^3).$$