Steps of Divide and Conquer

A divide and conquer strategy solves a problem by using 3 steps

(1) breaking it into subproblems that are themselves smaller instances of the same type of problem.

(2) recursively solve these subproblems

(3) Appropriately combining their answers.

is binary search a divide and conquer? 2 steps

Quicksort : 2 steps

Mergesort-3 steps

When to apply divide and conquer approach to solving a problem?

(1) Sub-problems should be sufficiently smaller than the original problem

(2) Sub-problems should of type similar to the original problem

(3) Time to taken to combine the solutions of sub-problems should be $O(n^k)$