



OCW: Data structures and algorithms. Author: I. Segura-Bedmar.

Unit 7: Divide and Conquer.

Divide and Conquer is an algorithmic paradigm. This strategy solves a problem using following three steps:

- Divide: break the given problem into subproblems of same type
- Conquer: recursively solve these subproblems.
- Combine: appropriately combine the answers.

In this lesson, we will study some common examples on this strategy, such as binary search and the sorting algorithms mergesort and quicksort. After this lesson, students should be able to:

- Explain the divide and conquer paradigm
- Explain divide and conquer algorithms such as binary search, find maximum, merge-sort or quick-sort.
- Given a problem, develop a divide and conquer algorithm for it.