

Uniqueness Testing — How can we test if the elements of a given collection of items S are all distinct?

Deleting Duplicates — How can we remove all but one copy of any repeated elements in S ?

Prioritizing Events — Suppose we are given a set of jobs to do, each with its own deadline. How should we organize them so that we get to as many jobs as possible before its deadline?

Median/Selection — Suppose we want to find the k th largest item in set S repeatedly while S is not changing but k is. .

Frequency Counting — Which is the most frequently occurring element in S , i.e., the mode?

Reconstructing the Original Order — How can we restore the original arrangement of a set of items after we permute them for some application?

Set Intersection/Union — How can we intersect or union the elements of two containers?