Given two arrays, write a function to compute their intersection.

**Example 1:**

**Input:** nums1 = [1,2,2,1], nums2 = [2,2]

**Output:** [2,2]

**Example 2:**

**Input:** nums1 = [4,9,5], nums2 = [9,4,9,8,4]

**Output:** [4,9]

**Note:**

* Each element in the result should appear as many times as it shows in both arrays.
* The result can be in any order.

**Follow up:**

* What if the given array is already sorted? How would you optimize your algorithm?
* What if *nums1*'s size is small compared to *nums2*'s size? Which algorithm is better?
* What if elements of *nums2* are stored on disk, and the memory is limited such that you cannot load all elements into the memory at once?