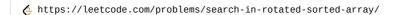
Intersection of Two Arrays

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References

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파이썬 알고리즘 인터뷰

2021 세종도서 학술부문 선정작. 현업과 실무에 유용한 주요 알고리즘 이론을 깊숙이 이 해하고, 파이썬의 핵심 기능과 문법까지 상세하게 이해할 수 있는 취업용 코딩 테스트를 위한 완벽 가이드다. 200여 개가 넘는...

ttps://www.aladin.co.kr/shop/wproduct.aspx?ItemId=245495826



References

- 1. heapq
- 2. Brute Force
- 3. Binary Search
- 4. Two pointer

1. heapq

```
class Solution:
   def intersection(self, nums1: List[int], nums2: List[int]) -> List[int]:
       nums1 = list(set(nums1))
       heapq.heapify(nums1)
       nums2 = list(set(nums2))
       heapq.heapify(nums2)
       answer = set()
        target = heapq.heappop(nums2)
       search = heapq.heappop(nums1)
       while True:
           if search == target:
               answer.add(search)
               if not nums1 or not nums2:
                   return list(answer)
                target = heapq.heappop(nums2)
               search = heapq.heappop(nums1)
           elif search > target:
               if not nums2:
                   return list(answer)
               target = heapq.heappop(nums2)
            elif search < target:
```

```
if not nums1:
    return list(answer)
search = heapq.heappop(nums1)
```

2. Brute Force

```
class Solution:
    def intersection(self, nums1: List[int], nums2: List[int]) -> List[int]:
        result = set()
        for n1 in nums1:
            for n2 in nums2:
                 if n1 == n2:
                       result.add(n1)
        return result
```

3. Binary Search

4. Two pointer

```
class Solution:
    def intersection(self, nums1: List[int], nums2: List[int]) -> List[int]:
       result = set()
       nums1.sort()
       nums2.sort()
       i = j = 0
        while i < len(nums1) and j < len(nums2):
           if nums1[i] > nums2[j]:
               j += 1
            elif nums1[i] < nums2[j]:</pre>
               i += 1
            else:
                result.add(nums1[i])
                i += 1
                j += 1
        return result
```