class Solution:

def maxNumber(self, nums1: List[int], nums2: List[int], k: int) -> List[int]:

def getSubsequence(nums, k):

stack = []

drop = len(nums) - k

for num in nums:

while stack and drop and stack[-1] < num:

stack.pop()

drop -= 1

stack.append(num)

return stack[:k]

def merge(nums1, nums2):

return [max(nums1, nums2).pop(0) for \_ in range(len(nums1) + len(nums2))]

best = []

for i in range(max(0, k - len(nums2)), min(k, len(nums1)) + 1):

best = max(best, merge(getSubsequence(nums1, i), getSubsequence(nums2, k - i)))

return best