

Maximum Sum Combination

Given two integer array **A** and **B** of size **N** each.

A **sum combination** is made by adding one element from array **A** and another element of array **B**.

Return the **maximum K valid distinct sum combinations** from all the possible sum combinations.

Note : Output array must be sorted in **non-increasing** order.

Example 1:

Input:

$N = 2$

$C = 2$

$A[] = \{3, 2\}$

$B[] = \{1, 4\}$

Output: $\{7, 6\}$

Explanation:

7 $\rightarrow (A : 3) + (B : 4)$

6 $\rightarrow (A : 2) + (B : 4)$

Example 2:

Input:

$N = 4$

$C = 3$

$A[] = \{1, 4, 2, 3\}$

$B[] = \{2, 5, 1, 6\}$

Output: $\{10, 9, 9\}$

Explanation:

10 $\rightarrow (A : 4) + (B : 6)$

9 $\rightarrow (A : 4) + (B : 5)$

9 $\rightarrow (A : 3) + (B : 6)$

Your Task:

You don't need to read input or print anything. Your task is to complete the function **maxCombinations()** which takes the interger **N**,integer **K** and two integer arrays **A []** and **B []** as parameters and returns the **maximum K valid distinct sum combinations** .

Expected Time Complexity: $O(K\log(N))$

Expected Auxiliary Space: $O(N)$

Constraints:

$$1 \leq N \leq 10^5$$

$$1 \leq K \leq N$$

$$1 \leq A[i], B[i] \leq 1000$$