Find K Pairs with Smallest Sums

You are given two integer arrays **nums1** and **nums2** sorted in ascending order and an integer **k**.

Define a pair **(u,v)** which consists of one element from the first array and one element from the second array.

Find the k pairs $(u_1,v_1),(u_2,v_2) \ldots(u_k,v_k)$ with the smallest sums.

Example 1:

```
Given nums1 = [1,7,11], nums2 = [2,4,6],  k = 3

Return: [1,2],[1,4],[1,6]

The first 3 pairs are returned from the sequence:
[1,2],[1,4],[1,6],[7,2],[7,4],[11,2],[7,6],[11,4],[11,6]
```

Example 2:

```
Given nums1 = [1,1,2], nums2 = [1,2,3],  k = 2

Return: [1,1],[1,1]

The first 2 pairs are returned from the sequence:
[1,1],[1,1],[1,2],[2,1],[1,2],[2,2],[1,3],[1,3],[2,3]
```

Example 3:

```
Given nums1 = [1,2], nums2 = [3],  k = 3

Return: [1,3],[2,3]

All possible pairs are returned from the sequence:
[1,3],[2,3]
```

Credits:

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