

Q1. Given two sorted arrays and a number  $x$ , find the pair whose sum is closest to  $x$  and **the pair has an element from each array**.

We are given two arrays  $ar1[0 \dots m-1]$  and  $ar2[0 \dots n-1]$  and a number  $x$ , we need to find the pair  $ar1[i] + ar2[j]$  such that absolute value of  $(ar1[i] + ar2[j] - x)$  is minimum.

Example:

Input:  $ar1[] = \{1, 4, 5, 7\};$

$ar2[] = \{10, 20, 30, 40\};$

$x = 33$

Output: 4 and 30

Input:  $ar1[] = \{1, 4, 5, 7\};$

$ar2[] = \{10, 20, 30, 40\};$

$x = 50$

Output: 7 and 40

Q-2: Given an array of **N** integers, the task is to arrange them in a **circular** arrangement in such a way that the element is strictly less than the sum of its adjacent elements. In case such an arrangement is not possible, then print **-1**.

**Example :**

**Input:**  $arr[] = \{1, 4, 4, 3, 2\}$

**Output:** 1 3 4 4 2

$$arr[0] = 1 < (2 + 3)$$

$$arr[1] = 4 < (1 + 4)$$

$$arr[2] = 4 < (4 + 3)$$

$$arr[3] = 3 < (4 + 2)$$

$$arr[4] = 2 < (3 + 1)$$

**Input:**  $arr[] = \{8, 13, 5\}$

**Output:** -1