**[Satisfy the equation](https://practice.geeksforgeeks.org/problems/satisfy-the-equation5847/1)**

Given an array **A[ ]** of **N** of  integers, find the index of values that satisfy**A + B = C + D** where **A,B,C** & **D** are integers values in the array.  
**Note:**As there may be multiple pairs satisfying the equation return lexicographically smallest order of  A, B, C and D and return all as -1 if there are no pairs satisfying the equation.

**Example 1:**

**Input:**

**N =** 7

**A[] =** {3, 4, 7, 1, 2, 9, 8}

**Output:**

0 2 3 5

**Explanation:**

A[0] + A[2] = 3+7 = 10

A[3] + A[5] = 1+9 = 10

**Example 2:**

**Input:**

**N =** 4

**A[] =** {424, 12, 31, 7}

**Output:**

-1 -1 -1 -1

**Explanation:**

There are no pairs satisfying the equation.

**Your Task:**  
You don't need to read input or print anything. Your task is to complete the function **satisfyEqn()** which takes an Integer N and an array A[] of size N as input and returns a vector of 4 integers denoting A, B, C, and D respectively.

**Expected Time Complexity:** O(N2\*logN2)  
**Expected Auxiliary Space:** O(N2)

**Constraints:**  
1 <= N <= 500  
1 <= A[i] <= 105