package day3;

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

public class Four\_Sum {

private static List<Integer[]> fourSum(int[] nums, int target) {

List<Integer[]> result = new ArrayList<>();

for (int i = 0; i < nums.length; i++) {

for (int j = i + 1; j < nums.length; j++) {

for (int k = j + 1; k < nums.length; k++) {

for (int l = k + 1; l < nums.length; l++) {

if (nums[i] + nums[j] + nums[k]+ nums[l] == target) {

result.add(new Integer[] { nums[i], nums[j], nums[k], nums[l] });

}

}

}

}

}

return result;

}

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

System.out.println("Enter the length of the array:");

int length = s.nextInt();

int [] nums = new int[length];

System.out.println("Enter the elements of the array:");

for(int i=0; i<length; i++ ) {

nums[i] = s.nextInt();

}

System.out.println("Enter the target of the array:");

int target = s.nextInt();

List<Integer[]> result = fourSum(nums, target);

for(Integer[] four: result) {

for(int num: four) {

System.out.print(num + " ");

}

System.out.println();

}

}

}