**Day 55 coding Statement : Given 2 integer arrays X and Y of same size. Consider both arrays as vectors and print the sum of maximum scalar product (Dot product) of 2 vectors.**

**Sample input 1:**

4

1 2 3 4

5 6 7 8

**Sample output 1:**

70

**Explanation :**

(8\*4 + 7\*3 + 6\*2 + 1\*5) = 70

**Sample input 2:**

4

-1 -2 -3 -4

5 6 -7 -8

**Sample output 2:**

37

**Explanation :**

(-4\*-8 + -3\*-7 + -2\*5 + -1\*6) = 37

import java.util.Arrays;

import java.util.Scanner;

public class RatanPrajapati\_day55 {

    static void swap(int arr[], int start, int end) {

        int temp = arr[start];

        arr[start] = arr[end];

        arr[end] = temp;

    }

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();

        int vec1[] = new int[n];

        for (int i = 0; i < n; i++) {

            vec1[i] = sc.nextInt();

        }

        int vec2[] = new int[n];

        for (int i = 0; i < n; i++) {

            vec2[i] = sc.nextInt();

        }

        Arrays.sort(vec1);

        Arrays.sort(vec2);

        int sum = 0;

        for (int i = 0; i < n; i++) {

            sum += vec1[i] \* vec2[i];

        }

        System.out.println(sum);

    }

}