**Sum of Middle Elements of two sorted arrays**

[array](http://www.practice.geeksforgeeks.org/tag-page.php?tag=array&isCmp=0)[Amazon](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Amazon&isCmp=1)

Given 2 sorted arrays A and B of size N each. Print sum of middle elements of the array obtained after merging the given arrays.

**Input:**  
The first line contains 'T' denoting the number of testcases. Then follows description of testcases.  
Each case begins with a single positive integer N denoting the size of array.  
The second line contains the N space separated positive integers denoting the elements of array A.  
The third line contains N space separated positive integers denoting the elements of array B.

**Output:**

For each testcase, print the sum of middle elements of two sorted arrays. The number of the elements in the merged array are even so there will be 2 numbers in the center n/2 and n/2 +1. You have to print their sum.

**Constraints:**  
 1<=T<=50  
 1<=N<=1000  
 1<=A[i]<=100000  
 1<=B[i]<=100000

**Example:**  
Input :  
1  
5  
1 2 4 6 10  
4 5 6 9 12  
   
Output :   
11

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=240>

#include <iostream>

#include <stdio.h>

#include <vector>

//#include <conio.h>

using namespace std;

int main() {

int t;

scanf("%d", &t);

while(t--) {

int N;

scanf("%d", &N);

int A[N];

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

scanf("%d", &A[i]);

}

int B[N];

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

scanf("%d", &B[i]);

}

std::vector<int> mezcla;

int i =0, j=0;

while(i < N && j < N) {

if(A[i] < B[j]) {

mezcla.push\_back(A[i++]);

}else{

mezcla.push\_back(B[j++]);

}

}

while(i < N) {

mezcla.push\_back(A[i++]);

}

while(j < N) {

mezcla.push\_back(B[j++]);

}

/\*for(int i =0; i < mezcla.size(); i++) {

printf("%d ", mezcla[i]);

}

printf("\n");\*/

int n = N + N;

// printf("%d", n/2);

printf("%d\n", mezcla[ n/2 -1 ] + mezcla[n/2]);

}

// getch();

return 0;

}