**Find the median**

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

Given the marks of all students, calculate the median.

**Input:**  
The first line of input takes the number of test cases, T. Then T test cases follow. Each of the T test cases takes 2 input lines.The first line of each test case takes the number of students, N.The second line of each test case takes N space separated integers denoting the marks of all the students.

**Output:**

Print the floor value of the median for each test case on a new line.

**Constraints:**

1<=T<=100

1<=N<=100

1<=Marks<=100

**Example:**

**Input:**  
3  
4  
56 67 30 79  
4  
78 89 67 76  
5  
90 100 78 89 67

**Output:**  
61  
77  
89

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

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=1175>

#include <iostream>

#include <stdio.h>

#include <vector>

#include <algorithm>

using namespace std;

int main() {

int t;

scanf("%d", &t);

while(t--) {

int n;

scanf("%d", &n);

std::vector<int> marks;

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

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

int elem;

scanf("%d", &elem);

marks.push\_back(elem);

}

int mediana = 0;

/\* ordeno el array para obtener la mediana \*/

std::sort(marks.begin(), marks.end());

if(marks.size() % 2 == 0) {

mediana = ( marks[marks.size()/2] + marks[marks.size()/2-1] ) /2;

} else {

mediana = marks[marks.size()/2];

}

printf("%d\n", mediana);

}

// system("pause");

return 0;

}