





# Diagonal Difference ☆



**Problem** Submissions Leaderboard Editorial △

Given a square matrix, calculate the absolute difference between the sums of its diagonals.

For example, the square matrix  $\boldsymbol{arr}$  is shown below:

- 1 2 3
- 4 5 6
- 9 8 9

The left-to-right diagonal = 1+5+9=15. The right to left diagonal = 3+5+9=17. Their absolute difference is |15-17|=2.

#### **Function description**

Complete the *diagonalDifference* function in the editor below. It must return an integer representing the absolute diagonal difference.

diagonal Difference takes the following parameter:

• arr: an array of integers .

#### **Input Format**

The first line contains a single integer, n, the number of rows and columns in the matrix arr.

Each of the next n lines describes a row, arr[i], and consists of n space-separated integers arr[i][j].

#### Constraints

•  $-100 \le arr[i][j] \le 100$ 

#### **Output Format**

Print the absolute difference between the sums of the matrix's two diagonals as a single integer.

# Sample Input

3

11 2 4

4 5 6

10 8 -12

### **Sample Output**

15

## **Explanation**

The primary diagonal is:

11

5

-12



```
The secondary diagonal is:

4
5
10

Sum across the secondary diagonal: 4 + 5 + 10 = 19

Difference: |4 - 19| = 15

Note: |x| is the absolute value of x
```

```
C
                                                                                        ₩ 🐪 🚱
     #include<stdio.h>
 2
     int main()
 3
     {
 4
         int i,j,n=0,m=0,b=2,a=0;
5
         signed int s1=0,s2=0,sum;
6
         int arr[10][10];
 7
         scanf("%d",&n);
8
         m=n;
         for(i=0;i<n;i++)
9
10
              for(j=0;j<m;j++)
11
12
13
                  scanf("%d",&arr[i][j]);
14
15
          for(i=0;i<m;i++)
16
17
              for(j=0;j<n;j++)
18
19
20
                  if(i==j)
21
                  {
                      s1=s1+arr[i][j];
22
23
                  }
24
                                                                                      Line: 28 Col: 25
```

**1** Upload Code as File

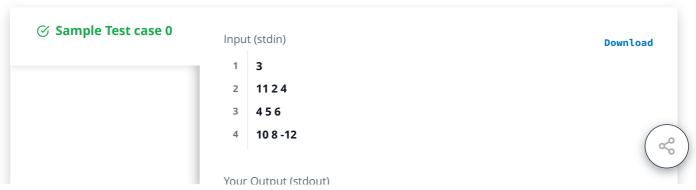
☐ Test against custom input

Run Code

Submit Code

# **Congratulations!**

You have passed the sample test cases. Click the submit button to run your code against all the test cases.





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