

<https://course.acciojob.com/idle?question=0ca3a15a-7003-4c33-850f-7e1e65798015>

• EASY

• Max Score: 30 Points

## Alt Matrix Sum

You are given a chessboard of size  $N \times N$ , where the top left square is black. Each square contains a value. Find the sum of the values of all black squares and all white squares.

Remember that in a chessboard, black and white squares are alternate.

### Input Format

The first line contains  $N$ , the size of a row of the square matrix.

The next  $N$  lines contain  $N$  space-separated integers each.

### Output Format

Print two lines, the first line containing the sum of black squares and the second line containing the sum of white squares.

### Example 1

Input

```
3
1 2 3
4 5 6
7 8 9
```

Output

```
25
20
```

Explanation

Black squares contain 1, 3, 5, 7, 9: sum = 25

White squares contain 2, 4, 6, 8: sum = 20

## Example 2

Input

```
2
3 5
7 4
```

Output

```
7
12
```

Explanation

Black squares contain 3, 4: sum = 7

White squares contain 5, 7: sum = 12

## Constraints

$1 \leq N \leq 1000$

$1 \leq \text{matrix}[i][j] \leq 10^5$

### Topic Tags

- 2D-Arrays

# My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws java.lang.Exception
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();

        int arr[][]=new int[n][n];
        for(int i=0;i<n;i++)
        for(int j=0;j<n;j++)
            arr[i][j]=s.nextInt();
        int black=0,sum=0;
        for(int i=0;i<n;i++){
            int c=i%2;
            for(int j=0;j<n;j++)
            {
                if(c==0) {black+=arr[i][j];c=1;}
                else {sum+=arr[i][j];c=0;}
            }
        }
        System.out.print(black+"\n"+sum);
    }
}
```