https://course.acciojob.com/idle?question=b4f7c7ed-ed3f-4b4f-9c58-c3257660a354

- EASY
- Max Score: 30 Points

Sum of upper and lower triangles

Given a square matrix of size `n*n`, print the sum of upper and lower triangular elements.

Upper Triangle consists of elements on the diagonal and above it.

Lower triangle consists of elements on the diagonal and below it.

Note

Diagonal here refers to the primary diagonal (starting at upper left corner and ending at bottom right corner).

Your task is to complete the function `triangleSums` which receives `n` and input matrix as parameters and prints the sum of upper and lower triangles separated by space.

Input Format

First line contains the value 'n'.

Next 'n' of each lines contain 'n' spaced integers.

Output Format

Print space separated sum of upper triangle followed by lower triangle.

Example 1

Input

```
3
1 2 3
1 5 3
4 5 6
```

Output

```
20 22
```

Explanation

Sum of lower triangle is 1+5+6+1+5+4 = 22 and upper triangle is 1+5+6+2+3+3 = 20

Example 2

Input

```
2
1 2
5 6
```

Output

```
9 12
```

Explanation

Sum of lower triangle is 1+6+5= 12 and upper triangle is 1+6+2 = 9

Constraints

1 <= `n` <= 10^3

1 <= `mat[i][j]` <=10^3

Topic Tags

- **Math**
- **2D-Arrays**

My code

```
// n javaimport 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 low=0, high=0;
		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();
					  if(i>=j)
						high+=arr[i][j];
					  if(i<=j)
						low+=arr[i][j];
				}
			 }
		    System.out.print(low+" "+high);
	}
```

```
}
```