

Daily Challenge

Happy Coding from necse



SkillRack

Matrix Sum - L or Inverted L

The program must accept an integer matrix of size **N*N** as the input. The program must find the sum of integers in the **L-shape** and **inverted L-shape** of the matrix. If the sum of the integers in L-shape and the sum of the integers in inverted L-shape are equal then print **YES** as the output. Else the program must print **NO** as the output.

Boundary Condition(s):

3 <= N <= 50

1 <= Matrix element value <= 1000

Input Format:

The first line contains N.

The next N lines each contain N integers separated by a space.

Output Format:

The first line contains either YES or NO.

Example Input/Output 1:

Input:

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

Output:

```
YES
```

Explanation:

The integers in the L-shape are highlighted below.

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

The integers in the inverted L-shape are highlighted below.

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

The sum of integers in the L-shape (1+2+3+4+5+6+7) is **28**.

The sum of integers in the inverted L-shape (1+6+5+4+2+3+7) is **28**.

Both the sum values are equal. So YES is printed.

Example Input/Output 2:

Input:

```
5
7 27 20 60 67
82 77 12 74 32
98 14 62 1 77
45 11 55 6 92
27 30 30 27 8
```

Output:

```
NO
```

Example Input/Output 3:

Input:

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

Output:

```
YES
```

Max Execution Time Limit: 50 millisecs



```
1 import java.util.*;
2 public class Hello {
3
4     public static void main(String[] args) {
5
6         Scanner sc = new Scanner(System.in);
7
8         int n = sc.nextInt();
9
10        int lowerLevel=0,upperLevel=0;
11
12
13        for(int i=0;i<n;i++){
14            for(int j=0;j<n;j++){
15
16                int tt = sc.nextInt();
17
18                if(i==0 || j==n-1) upperLevel+=tt;
19
20                if(i==n-1 || j==0) lowerLevel+=tt;
21
22            }
23        }
24
25        System.out.println(lowerLevel==upperLevel ? "YES" : "NO");
26
27
28    }
29 }
30 }
```

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Code did not pass the execution



Input:

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

Expected Output:

YES

Your Program Output:

28 28

Save

Run