- **EASY**

- **Max Score: 30 Points**

Problem 6

Write a program that will take the input of all the elements of a 5x5 2D array and determine if it is a lower triangular Matrix.

Print "YES" if it is a lower triangular matrix else print "NO".

NOTE: A 2D array is said to be a lower triangular matrix if all the elements above its main diagonal are zero and all the elements in the main diagonal and below that is non-zero.

Input Format

Input will be 5x5 2D array

Output Format

Print "YES" if it is a lower triangular matrix else print "NO".

Example 1

Input

```
1 0 0 0 0
2 3 0 0 0
5 1 7 0 0
7 3 6 9 0
4 8 9 1 3
```

Output

```
YES
```

Explanation

The matrix is lower triangular as only lower triangular entries are non zero

Example 2

Input

```
1 0 0 0 1
2 3 0 0 0
5 1 7 0 0
7 3 6 9 0
4 8 9 1 3
```

Output

```
NO
```

Explanation

The matrix is not lower triangular as it has one non zero entry in upper triangle half.

Constraints

```
1<n<1000
where n is elements of matrix
```

My code

```
// n java
import java.util.*;
import java.lang.*;
```

```java
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 arr[][]= new int[5][5];
    int f=0;
    for(int i=0;i<5;i++){
      for(int j=0;j<5;j++)
        {
          arr[i][j]=s.nextInt();
          if(i<j) {if(arr[i][j]!=0) f=1;}
              else
          {
              if(arr[i][j]==0)
                    f=1;
          }
        }}
    if(f==0) System.out.print("YES");
    else System.out.print("NO");
        }
}
```