

<https://course.acciojob.com/idle?question=74e5a531-cd32-443b-9892-148cbc44006e>

● EASY

● Max Score: 30 Points

Maxima Minima

Given an $n \times n$ matrix `mat` find an element such that it is the smallest in a row and largest in a column, if such an element does not exist return `-1`.

Input Format

First line contains the values `n`.

Next `n` lines contain `n` spaced integers.

Output Format

Return the element that is smallest in a row and largest in a column if not found return `-1`.

Example 1

Input

```
2
1 3
6 5
```

Output

```
5
```

Explanation

Row 2 contains minimum element 5 that is largest in the 2nd column.

Example 2

Input

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

Output

7

Explanation

Here the minimum value is 7 in the third row and the largest value in the 1st column.

Constraints

$1 \leq n \leq 10^3$

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

Topic Tags

- **2D-Arrays**

My code

// in java

```
import java.util.*;
```

```
public class Main {
    public static int maximaMinima(int[][] mat) {
        //Write code here
        int n=mat.length;
```

```

//int m=arr[0].length; for column
for (int i = 0; i < n; i++)
{
    int min=mat[i][0];
    int t=0;//pointing column no which has low value
in arr
    for (int j = 0; j < n; j++)
    {
        if(mat[i][j]<min)
        {
            min=mat[i][j] ;
            t=j;
        }
    }
    int flag=0;
    int max=min;
    for (int j = 0; j < n; j++)
    {
        if(mat[j][t]>max)
        {
            flag=1;
        }
    }
    if(flag==0)
        return max;
    }
return -1;
}

```

```

public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    int n;

```

```
n = sc.nextInt();
int[][] matrix = new int[n][n];
for (int i = 0; i < n; i++)
    for (int j = 0; j < n; j++)
        matrix[i][j] = sc.nextInt();
int result = maximaMinima(matrix);
System.out.println(result);
sc.close();
}
}
```