

---

**Second Largest Values****X33741\_en**

---

Write a program that prints the second largest value in each row of a given matrix.  
Your solution must meet the following conditions:

- Write a function

```
def second_largest_values (m)
```

that receives a matrix of strictly positive integer numbers and returns a list with the second largest value in each row.

- write a main program that reads a matrix of integers from the input, and prints the second largest values in each row. The program must call the function `second_largest_values`.

**Input**

The input is a matrix of strictly positive integers. Each row of the matrix is given in a separate line. All lines have the same amount of elements. Each row contains at least two different values.

**Output**

The output is the list of the second largest values in each row, in the format shown in the examples.

**Sample input 1**

```
5 12 23 4
10 7 6 22
9 34 1 112
```

**Sample input 2**

```
25 12 23 4 9
10 22 22 1 22
3 3 3 2 2
87 34 1 119 87
```

**Sample output 1**

```
second largest in row 0 is 12
second largest in row 1 is 10
second largest in row 2 is 34
```

**Sample output 2**

```
second largest in row 0 is 23
second largest in row 1 is 10
second largest in row 2 is 2
second largest in row 3 is 87
```

**Problem information**

Author: ProAl1 professors

Generation: 2026-01-25T15:16:58.022Z

© Jutge.org, 2006–2026.

<https://jutge.org>