Min and Max ★

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min

The tool min returns the minimum value along a given axis.

```
import numpy

my_array = numpy.array([[2, 5],
                    [3, 7],
                    [1, 3],
                    [4, 0]])

print numpy.min(my_array, axis = 0)        #Output : [1 0]
print numpy.min(my_array, axis = 1)        #Output : [2 3 1 0]
print numpy.min(my_array, axis = None)     #Output : 0
print numpy.min(my_array)                #Output : 0
```

By default, the axis value is None. Therefore, it finds the minimum over all the dimensions of the input array.

max

The tool max returns the maximum value along a given axis.

```
import numpy

my_array = numpy.array([[2, 5],
                    [3, 7],
                    [1, 3],
                    [4, 0]])

print numpy.max(my_array, axis = 0)        #Output : [4 7]
print numpy.max(my_array, axis = 1)        #Output : [5 7 3 4]
print numpy.max(my_array, axis = None)     #Output : 7
print numpy.max(my_array)                #Output : 7
```

By default, the axis value is None. Therefore, it finds the maximum over all the dimensions of the input array.

Task

You are given a 2-D array with dimensions NXM.

Your task is to perform the min function over axis 1 and then find the max of that.

Input Format

The first line of input contains the space separated values of N and M.

The next N lines contains M space separated integers.

Output Format

Compute the min along axis 1 and then print the max of that result.

Sample Input

```
4 2
2 5
3 7
1 3
4 0
```

Sample Output

```
3
```

Explanation

The min along axis $\mathbf{1}$ = $[2, 3, 1, 0]$
The max of $[2, 3, 1, 0]$ = $\mathbf{3}$

Change Theme Python 3

```python
import numpy as np

if __name__ == '__main__':
    n, m = tuple(map(int, input().split()))

    data = []

    for _ in range(n):
        data.append(list(map(int, input().split())))

    matrix = np.array(data)

    minimum = np.min(matrix, axis=1)
    maximum = np.max(minimum)

    print(maximum)

```

Line: 17 Col: 1

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63%

Python ★★★★★

Congratulations

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