Min and Max

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 $N \times M$.
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 $1 = [2, 3, 1, 0]$
The *max* of $[2, 3, 1, 0] = 3$