

# 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**