

# 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