



Practice &gt; Python &gt; Numpy &gt; Concatenate

# Concatenate ☆

88/115 challenges solved

Rank: 2780 | Points: 1715



Your Concatenate submission got 20.00 points.

Share

Tweet

[Try the next challenge](#)**Problem**

## Submissions

## Leaderboard

## Discussions

## Editorial

**Concatenate**

Two or more arrays can be concatenated together using the *concatenate* function with a tuple of the arrays to be joined:

```
import numpy

array_1 = numpy.array([1,2,3])
array_2 = numpy.array([4,5,6])
array_3 = numpy.array([7,8,9])

print numpy.concatenate((array_1, array_2, array_3))

#Output
[1 2 3 4 5 6 7 8 9]
```

If an array has more than one dimension, it is possible to specify the axis along which multiple arrays are concatenated. By default, it is along the first dimension.

```
import numpy

array_1 = numpy.array([[1,2,3],[0,0,0]])
array_2 = numpy.array([[0,0,0],[7,8,9]])

print numpy.concatenate((array_1, array_2), axis = 1)

#Output
[[1 2 3 0 0 0]
 [0 0 0 7 8 9]]
```

**Task**

You are given two integer arrays of size  $N \times P$  and  $M \times P$  ( $N$  &  $M$  are rows, and  $P$  is the column). Your task is to *concatenate* the arrays along axis 0.

**Input Format**

The first line contains space separated integers  $N$ ,  $M$  and  $P$ .

The next  $N$  lines contains the space separated elements of the  $P$  columns.

After that, the next  $M$  lines contains the space separated elements of the  $P$  columns.

Author

DOSHI

Difficulty

Easy

Max Score

20

Submitted By

11038

## NEED HELP?

[View discussions](#)[View editorial](#)[View top submissions](#)

## RATE THIS CHALLENGE



## MORE DETAILS

[Download problem statement](#)[Download sample test cases](#)[Suggest Edits](#)

**Output Format**

Print the concatenated array of size  $(N + M) \times P$ .

**Sample Input**

```
4 3 2
1 2
1 2
1 2
1 2
3 4
3 4
3 4
```

**Sample Output**

```
[[1 2]
 [1 2]
 [1 2]
 [1 2]
 [3 4]
 [3 4]
 [3 4]]
```

**Current Buffer** (saved locally, editable)

Python 3



```
1 import numpy
2 n,m,p=[int(i) for i in input().split()]
3 a=numpy.array([list(map(int,input().split())) for i in range(n)])
4 b=numpy.array([list(map(int,input().split())) for i in range(m)])
5 print(numpy.concatenate((a,b),axis=0))
6
7
8
```

Line: 5 Col: 37

Upload Code as File

☐ Test against custom input

Run Code

Submit Code



You have earned 20.00 points!  
88/115 challenges solved.

77%

**Congratulations**

You solved this challenge. Would you like to challenge your friends?

**Next  
Challenge**

✔ Testcase 0

✔ Testcase 1

✔ Testcase 2

Input (stdin)

Download

4 3 2  
1 2  
1 2  
1 2

Expected Output

Download

[[1 2]  
[1 2]  
[1 2]  
[1 2]

Compiler Message

Success