



Practice &gt; Python &gt; Numpy &gt; Shape and Reshape

# Shape and Reshape ☆

86/115 challenges solved

Rank: 2921 | Points: 1675



Your Shape and Reshape submission got 20.00 points.

Tweet

[Try the next challenge](#) | [Try a Random Challenge](#)

## Problem

## Submissions

## Leaderboard

## Discussions

## Editorial

## shape

The *shape* tool gives a tuple of array dimensions and can be used to change the dimensions of an array.

### (a). Using *shape* to get array dimensions

```
import numpy

my_1D_array = numpy.array([1, 2, 3, 4, 5])
print my_1D_array.shape    #(5,) -> 5 rows and 0 columns

my_2D_array = numpy.array([[1, 2],[3, 4],[6,5]])
print my_2D_array.shape    #(3, 2) -> 3 rows and 2 columns
```

### (b). Using *shape* to change array dimensions

```
import numpy

change_array = numpy.array([1,2,3,4,5,6])
change_array.shape = (3, 2)
print change_array

#Output
[[1 2]
 [3 4]
 [5 6]]
```

## reshape

The *reshape* tool gives a new shape to an array without changing its data. It creates a new array and does not modify the original array itself.

```
import numpy

my_array = numpy.array([1,2,3,4,5,6])
print numpy.reshape(my_array, (3,2))

#Output
[[1 2]
 [3 4]
 [5 6]]
```

Author

DOSHI

Difficulty

Easy

Max Score

20

Submitted By

15781

NEED HELP?

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

RATE THIS CHALLENGE



MORE DETAILS

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

**Task**

You are given a space separated list of nine integers. Your task is to convert this list into a **3x3** *NumPy* array.

**Input Format**

A single line of input containing **9** space separated integers.

**Output Format**

Print the **3x3** *NumPy* array.

**Sample Input**

```
1 2 3 4 5 6 7 8 9
```

**Sample Output**

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

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



Python 3



```
1 import numpy
2 myarray=numpy.array([int(i) for i in input().split()])
3 print(numpy.reshape(myarray,(3,3)))
4
5
6
```

Line: 2 Col: 54

Upload Code as File

☐ Test against custom input

Run Code

Submit Code



You have earned 20.00 points!  
86/115 challenges solved.

75%

## Congratulations

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



Next  
Challenge

✔ Testcase 0

✔ Testcase 1

✔ Testcase 2

Input (stdin)

Download

1 2 3 4 5 6 7 8 9

Expected Output

Download

[[1 2 3]  
[4 5 6]  
[7 8 9]]

Compiler Message

Success