Zeros and Ones

105/115 challenges solved

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zeros

The zeros tool returns a new array with a given shape and type filled with **0**'s.

```
import numpy

print numpy.zeros((1,2))                #Default type is float
#Output : [[ 0.  0.]]

print numpy.zeros((1,2), dtype = numpy.int) #Type changes to int
#Output : [[0 0]]
```

ones

The ones tool returns a new array with a given shape and type filled with **1**'s.

```
import numpy

print numpy.ones((1,2))                 #Default type is float
#Output : [[ 1.  1.]]

print numpy.ones((1,2), dtype = numpy.int) #Type changes to int
#Output : [[1 1]]
```

Task

You are given the shape of the array in the form of space-separated integers, each integer representing the size of different dimensions, your task is to print an array of the given shape and integer type using the tools `numpy.zeros` and `numpy.ones`.

Input Format

A single line containing the space-separated integers.

Constraints

$1 \leq \text{each integer} \leq 3$

Output Format

First, print the array using the `numpy.zeros` tool and then print the array with the `numpy.ones` tool.

Sample Input 0

```
3 3 3
```

Sample Output 0

```
[[[0 0 0]
  [0 0 0]
```

```
 [0 0 0]]

[[0 0 0]
 [0 0 0]
 [0 0 0]]

[[0 0 0]
 [0 0 0]
 [0 0 0]]]
[[[1 1 1]
 [1 1 1]
 [1 1 1]]

[[1 1 1]
 [1 1 1]
 [1 1 1]]

[[1 1 1]
 [1 1 1]
 [1 1 1]]]
```

Explanation 0

Print the array built using `numpy.zeros` and `numpy.ones` tools and you get the result as shown.

Change Theme Language Python 3

```
1  import numpy as np
2
3  shape = tuple(map(int, input().split()))
4  print(np.zeros(shape, dtype=int))
5  print(np.ones(shape, dtype=int))
```

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105/115 challenges solved.

91%

Congratulations

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

Next Challenge

- Test case 0
- Test case 1
- Test case 2
- Test case 3

Compiler Message

```
Success
```

Input (stdin) Download

```
3 3 3
```

Expected Output Download

```
[[[0 0 0]
  [0 0 0]
  [0 0 0]]

 [[0 0 0]
  [0 0 0]
```