Zeros and Ones

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.