

Hexaware Coding Challenge Plan Day - 7

Problem - 1 Floor, Ceil and Rint

Submissions

Leaderboard

Discussions

HackerRank

Prepare > Python > Numpy > Floor, Ceil and Rint

```
print numpy rint(my_array)  #[ 1.  2.  3.  4.  6.  7.]
```

Task
You are given a 1-D array, A . Your task is to print the *floor*, *ceil* and *rint* of all the elements of A .

Note
In order to get the correct output format, add the line `numpy.set_printoptions(legacy='1.13')` below the numpy import.

Input Format
A single line of input containing the space separated elements of array A .

Output Format
On the first line, print the *floor* of A .
On the second line, print the *ceil* of A .
On the third line, print the *rint* of A .

Sample Input
1.1 2.2 3.3 4.4 5.5 6.6 7.7 8.8 9.9

Sample Output
[1. 2. 3. 4. 5. 6. 7. 8. 9.]

Exit Full Screen View

You have earned 20.00 points!

32/115 challenges solved.

28%

Congratulations

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

[f](#) [t](#) [in](#)

Next Challenge

Test case 0

Test case 1

Test case 2

Compiler Message

Success

Input (stdin)

Download

1 1.1 2.2 3.3 4.4 5.5 6.6 7.7 8.8 9.9

Expected Output

Download

1 [1. 2. 3. 4. 5. 6. 7. 8. 9.]
2 [2. 3. 4. 5. 6. 7. 8. 9. 10.]
3 [1. 2. 3. 4. 6. 7. 8. 9. 10.]

Problem - 2 Inner and Outer

Submissions

Leaderboard

Discussions

HackerRank

Prepare > Python > Numpy > Inner and Outer

```
0 1  
2 3
```

Task
You are given two arrays: A and B .
Your task is to compute their inner and outer product.

Input Format
The first line contains the space separated elements of array A .
The second line contains the space separated elements of array B .

Output Format
First, print the inner product.
Second, print the outer product.

Sample Input
0 1
2 3

Sample Output
3
[[0 0]
 [2 3]]

Exit Full Screen View

You have earned 20.00 points!

33/115 challenges solved.

29%

Congratulations

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

[f](#) [t](#) [in](#)

Next Challenge

Test case 0

Test case 1

Test case 2

Compiler Message

Success

Input (stdin)

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1 0 1
2 2 3

Expected Output

Download

1 3
2 [[0 0]
3 [2 3]]

Problem - 3 Linear Algebra

Submissions

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Discussions

Editorial

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Prepare > Python > Numpy > Linear Algebra

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Other routines can be found [here](#)

Task
You are given a square matrix A with dimensions $N \times N$. Your task is to find the determinant. Note: Round the answer to 2 places after the decimal.

Input Format
The first line contains the integer N .
The next N lines contains the N space separated elements of array A .

Output Format
Print the determinant of A .

Sample Input

```
2
1.1 1.1
1.1 1.1
```

Sample Output

```
0.0
```

You have earned 20.00 points!
34/115 challenges solved.

30%

Congratulations
You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#) [Next Challenge](#)

Test case 0

Test case 1

Test case 2

Compiler Message
Success

Input (stdin)

```
2
1.1 1.1
1.1 1.1
```

Expected Output

```
0.0
```

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Problem - 4 Min and Max

Submissions

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Discussions

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Prepare > Python > Numpy > Min and Max

Exit Full Screen View

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

You have earned 20.00 points!
35/115 challenges solved.

30%

Congratulations
You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#) [Next Challenge](#)

Test case 0

Test case 1

Test case 2

Compiler Message
Success

Input (stdin)

```
4 2
2 5
3 7
1 3
4 0
```

Expected Output

```
3
```

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Problem - 5 Iterables and Iterators

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[Prepare](#) > [Python](#) > [Itertools](#) > [Iterables and Iterators](#)

Problem

Submissions

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Discussions

The itertools module standardizes a core set of fast, memory efficient tools that are useful by themselves or in combination. Together, they form an iterator algebra making it possible to construct specialized tools succinctly and efficiently in pure Python.

To read more about the functions in this module, check out their [documentation](#) here.

You are given a list of N lowercase English letters. For a given integer K , you can select any K indices (assume 1-based indexing) with a uniform probability from the list.

Find the probability that at least one of the K indices selected will contain the letter: 'a'.

Input Format

The input consists of three lines. The first line contains the integer N , denoting the length of the list. The next line consists of N space-separated lowercase English letters, denoting the elements of the list.

The third and the last line of input contains the integer K , denoting the number of indices to be selected.

Output Format

Output a single line consisting of the probability that at least one of the K indices selected contains the letter: 'a'.

Note: The answer must be correct up to 3 decimal places.

you have earned 40.00 points!

36/115 challenges solved.

31%

Congratulations

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

[f](#) [t](#) [in](#)

Next Challenge

Test case 5

Test case 6

Test case 7

Test case 8

Test case 9

Test case 10

Test case 11

Compiler Message

Success

Input (stdin)

Expected Output

Download

Download

```
4
a a c d
2

0.833333333333
```