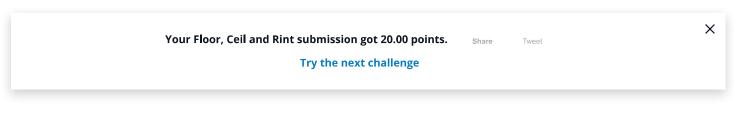
Floor, Ceil and Rint *





```
Problem
                     Submissions
                                          Leaderboard
                                                                Editorial 🖰
floor
The tool floor returns the floor of the input element-wise.
The floor of m{x} is the largest integer m{i} where m{i} \leq m{x}.
  import numpy
  my_array = numpy.array([1.1, 2.2, 3.3, 4.4, 5.5, 6.6, 7.7, 8.8, 9.9])
                                      #[ 1. 2. 3. 4. 5. 6. 7. 8. 9.]
  print numpy.floor(my_array)
ceil
The tool ceil returns the ceiling of the input element-wise.
The ceiling of oldsymbol{x} is the smallest integer oldsymbol{i} where oldsymbol{i} \geq oldsymbol{x}.
  import numpy
  my_array = numpy.array([1.1, 2.2, 3.3, 4.4, 5.5, 6.6, 7.7, 8.8, 9.9])
  print numpy.ceil(my_array)
                                       #[ 2. 3. 4. 5. 6. 7. 8. 9. 10.]
The rint tool rounds to the nearest integer of input element-wise.
  import numpy
  my_array = numpy.array([1.1, 2.2, 3.3, 4.4, 5.5, 6.6, 7.7, 8.8, 9.9])
                                      #[ 1. 2. 3. 4. 6. 7. 8. 9. 10.]
  print numpy.rint(my_array)
```

Task

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

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 $m{A}$.

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

```
Change Theme
                                                                                               Python 3

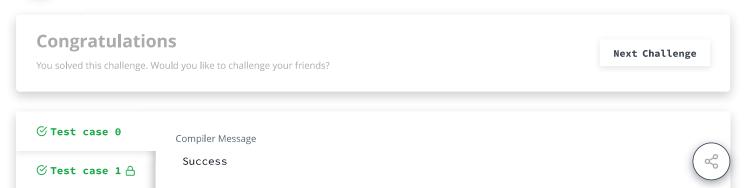
▼ ② ∑ ② ②
  1
       import numpy as np
  2
  3
      np.set_printoptions(legacy='1.13')
  4
       if __name__ == '__main__':
  5
           values = list(map(float, input().split()))
  6
  7
           array = np.array(values)
  8
  9
 10
           print(np.floor(array))
 11
           print(np.ceil(array))
           print(np.rint(array))
 12
 13
                                                                                                                      Line: 13 Col: 1
oldsymbol{1} Upload Code as File oxedsymbol{\square} Test against custom input
                                                                                                                      Submit Code
                                                                                                      Run Code
```

You have earned 20.00 points!

75/115 challenges solved.

65%





```
      Test case 2 A
      Input (stdin)
      Download

      1
      1.1 2.2 3.3 4.4 5.5 6.6 7.7 8.8 9.9
      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.]
```

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