Started on	Saturday, 7 December 2024, 8:49 PM
State	Finished
Completed on	Saturday, 7 December 2024, 8:56 PM
Time taken	7 mins 50 secs
Marks	3.00/3.00
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

Correct

Mark 1.00 out of 1.00

Write a python program to find the 1-Norm of a matrix and display the results in two decimal places.

For example:

Input	Result
[[-1, 3],[3, -4],[1, 7]]	14.00

Answer: (penalty regime: 0 %)

```
"""Program to find the 1-Norm of a matrix
Developed by : JAIYANTAN S
Register no : 24900025
"""
import numpy as np
InputArray = np.array(eval(input()))
OneNorm = np.linalg.norm(InputArray, 1)
print(OneNorm)
```

	Input	Expected	Got	
✓	[[-1, 3],[3, -4],[1, 7]]	14.00	14.0	✓
✓	[[1, 2, 3],[-3,-4,-1],[9,6,1]]	13.00	13.0	✓

Passed all tests! ✓

▸ Show/hide question author's solution (Python3)

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

Write a program to find L2-norm of a matrix and display the result in two decimal places.

For example:

Input	Result
[[1,2],[3,4]]	5.46
[[-1, 3],[3, -4],[1, 7]]	8.66

Answer: (penalty regime: 0. %)

Reset answer

```
'''
Program to find 2-norm of a matrix.
Developed by: JAIYANTAN S
RegisterNumber: 24900025
'''
import numpy as np
InputArray = np.array(eval(input()))
TwoNorm=np.linalg.norm(InputArray, 2)
print(f"{TwoNorm:.2f}")
```

	Input	Expected	Got	
✓	[[1,2],[3,4]]	5.46	5.46	✓
✓	[[-1, 3],[3, -4],[1, 7]]	8.66	8.66	✓
✓	[[2, 3],[3, 4],[1, 8]]	9.86	9.86	✓

Passed all tests! ✓

▸ Show/hide question author's solution (Python3)

Correct

Marks for this submission: 1.00/1.00.

Question **3**

Correct

Mark 1.00 out of 1.00

Write a program to find the Infinity of a matrix and display the result in two decimal places.

For example:

Input	Result
[[-1, 3],[3, -4],[1, 7]]	8.00

Answer: (penalty regime: 0. %)

```
"""Program to find the 1-norm of a matrix
Developed by : JAIYANTAN S
Register No : 24900025
"""

import numpy as np
InputArray = np.array(eval(input()))
InfinityNorm = np.linalg.norm(InputArray, np.inf)
print(InfinityNorm)
```

	Input	Expected	Got	
✓	[[-1, 3],[3, -4],[1, 7]]	8.00	8.0	✓
✓	[[1,2,3],[-9,-8,-3],[10,3,2]]	20.00	20.0	✓

Passed all tests! ✓

▸ Show/hide question author's solution (Python3)

Correct

Marks for this submission: 1.00/1.00.