INVERSE-OF-A-MATRIX

Aim:

To write a python program to find the inverse of a matrix

Equipment's required:

1. Hardware – PCs
2. Anaconda – Python 3.7 Installation / Moodle-Code Runner

Algorithm:

Step1 :
Step 2:
Step 3:
Step 4:

Program:

```
#Program to find the inverse of a matrix.
#Developed by: Nara Guna Susmitha
#RegisterNumber:24010204
import numpy as np
matrix=np.array([[1,0,3],[-1,2,-2],[2,3,-1]])
inverse=np.linalg.inv(matrix)
print(inverse)
```

Output:

```python
#Program to find the inverse of a matrix.
#Developed by: Nara Guna Susmitha
#RegisterNumber:24010204
import numpy as np
matrix=np.array([[1,0,3],[-1,2,-2],[2,3,-1]])
inverse=np.linalg.inv(matrix)
print(inverse)
```

	Expected	Got	
✓	[[-0.23529412 -0.52941176 0.35294118] [0.29411765 0.41176471 0.05882353] [0.41176471 0.17647059 -0.11764706]]	[[-0.23529412 -0.52941176 0.35294118] [0.29411765 0.41176471 0.05882353] [0.41176471 0.17647059 -0.11764706]]	✓

Passed all tests! ✓

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

Correct

Marks for this submission: 100.00/100.00.

Result:

Thus the inverse of given matrix is successfully solved using python program