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 : Import numpy package

Step 2: Get the input matrix

Step 3: Find the inverse of the matrix

Step 4: Print the result

Program:

```
#Program to find the inverse of a matrix.
#Developed by: PAVITHRA.M
#RegisterNumber: 22008686
import numpy as np
A = np.array([[2,1,1],[1,1,1],[1,-1,2]])
B = np.linalg.inv(A)
print(B)
```

Output:

Answer: (penalty regime: 0 %)

Reset answer

```
#Program to find the inverse of a matrix.
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import numpy as np
A = np.array([[2,1,1],[1,1,1],[1,-1,2]])
B = np.linalg.inv(A)
print(B)
```

	Expected	Got	
✔	[[1. -1. 0.] [-0.33333333 1. -0.33333333] [-0.66666667 1. 0.33333333]]	[[1. -1. 0.] [-0.33333333 1. -0.33333333] [-0.66666667 1. 0.33333333]]	✔

Passed all tests! ✔

Result:

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