MATHS ASSIGNMENT SET2 QUESTION5

AIM:

- PRINT INVERSE OF A MATRIX

PROGRAM :

```
import numpy as np

# Define a matrix as a numpy array
matrix = np.array([[1, 2], [3, 4]])

# Calculate the inverse of the matrix
try:
    inverse_matrix = np.linalg.inv(matrix)
    print("Original Matrix:")
    print(matrix)

    print("Inverse Matrix:")
    print(inverse_matrix)
except np.linalg.LinAlgError:
    print("The matrix is singular and does not have an inverse.")
```

OUTPUT:

```
Original Matrix:
[[1 2]
[3 4]]

Inverse Matrix:
[[-2.   1. ]
[ 1.5 -0.5]]
```

RESULT:

THE PROGRAM HAS RUN AND OUTPUT OBTAINED SUCCESFULLY