

Calculate the determinant of a square matrix using numpy.

1. Add Task Description :

Objective: Calculate the determinant of a square matrix using NumPy to understand its mathematical properties (e.g., invertibility or singularity). The determinant is crucial in linear algebra for solving equations, transformations, and eigenvalue problems.

2. Attach Screenshot Of Output. :

The determinant of the matrix is: -36.99999999999999

3. Describe Widget/Algorithm Used In Task:

numpy.linalg.det:

Uses LU decomposition to compute the determinant efficiently.

NumPy's implementation ensures numerical stability and handles floating-point errors effectively.