1. Generate two random matrices using NumPy. Find the elementwise and matrix product of the given matrices. The elements of both matrices must follow a normal distribution.

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1. Write a program that can reverse a square matrix of order N.

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1. Perform the following actions:
2. Create a null matrix (**Z**) of the shape (n, n).
3. Replace all the edge values of **Z** with “1”

Example:

Let Z = Null matrix of order 3

Z (after replacing) = [1, 1, 1, 1, 0, 1, 1, 1, 1]

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1. Write a program that:
2. Flattens a given square matrix.
3. Obtain the mean, variance and standard deviation of the flattened vector and store them in a vector (**L**).
4. Create a square matrix from the given vector L.

Use random values for the initial square matrix.

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1. Using NumPy, write a program that inputs an element (**N**) and a non-singular matrix of order **N**. Print the determinant, inverse and adjoint of the given matrix. The program must not have more than **four lines** of code.

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1. Write a function that converts a given python dictionary to a NumPy matrix. Save the result in a text file.

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