a. Using Numpy, write a basic array of operations on single array to add x to each element of array and subtract y from each element of array.

b. Using Numpy, write a program to add, subtract and multiply two matrices.

c. Write a Python program to do the following operations: Library: NumPy

1. Create multi-dimensional arrays and find its shape and dimension
2. Create a matrix full of zeros and ones
3. Reshape and flatten data in the array
4. Append data vertically and horizontally
5. Apply indexing and slicing on array
6. Use statistical functions on array - Min, Max, Mean, Median and Standard Deviation
7. Dot and matrix product of two arrays
8. Compute the Eigen values of a matrix
9. Solve a linear matrix equation such as 3 \* x0 + x1 = 9, x0 + 2 \* x1 = 8
10. Compute the multiplicative inverse of a matrix
11. Compute the rank of a matrix
12. Compute the determinant of an array