Assignment#1

NumPy Activities:

- Activity 1: Create an array using arange, linspace, ones, zeros, eye, and diag. Use the functions len (), and NumPy.shape() on these arrays.
- Activity 2: Create an array using random numbers. Try setting the seed before creating an array with random values.
- Activity 3: Create an array 'a' and use the function timeit to time a**2 and a+1.
- Activity 4: Create a simple two-dimensional array. How about odd numbers counting backward on the first row, and even numbers on the second? (Indexing and slicing)
- Activity 5: Create a multidimensional array and use functions like reshape and transposition. Compute statistics like std, mean and median across the different axis.

Matplotlib Activities:

- Activity 1: Create a file in idlelib to generate a line and save it as test_matplotlib. With ref to file test_matplotlib. Plot the figures with a solid line dotted and '-'and save them as Fig 1, 2, and 3.
- Activity 2: Create a file with an image for a random array and save it as **test_matplotlib_img1**. With ref to file **test_matplotlib_img1** plot and save the different figures as Fig 1,2 in two different colors.