Experiment 2

The aim of this experiment is to introduce the following Python packages: Numpy, Matplotlib and Pandas. The file exp1b_mannual.pdf gives an introduction to these packages. Implement the following steps in Python.

1. Create a 1D and 2D numpy array. Print the shape of the arrays.

2. Explore the utility of following functions in numpy: zeros(), ones(), arrange(), random.rand(), linspace(), add(), exp(), matmul().

3. Use Matplotlib to plot a straight line y=2x

4. Use Matplotlib to plot (a) y=exp(x), (b) y=sin(x)

5. Use Pandas to read a .csv file (wine.csv) and print the statistics of all columns in the file.