1. Create an array using numPy and perform the following operations on it
2. Create a one dimensional array (vector) iterate through all the elements and find the mean of the vector.
3. Create a 3X3 array and find the sum of all elements in the second column
4. Create array using other standard methods like ones and empty by taking the zeros as reference

2. Create a matrix and perform the below operations on it

1. Get the diagonal elements and calculate the sum of all the diagonal elements.
2. Calculate the column wise and row wise mean of the created matrix

3. Can we reshape the array into any shape? If not, then what are the cases?

4. Use arange and create a sequence of 6 numbers and try to reshape into all the possible ways and combinations