

---

# Python Advance Assignment 1

1. What makes NumPy.shape() different from NumPy.size()?

numPy.shape() gives the size of the dimension of the array whereas numPy.size gives the size of the array along a particular axis.

2. In NumPy, describe the idea of broadcasting.

numPy can perform smooth arithmetic computation on different shapes of array.

3. What makes Python better than other libraries for numerical computation?

Python with its dynamic data structures, and efficient implementation of multi-dimensional arrays and matrices. It has numPy library which perform accurate computation with matrices and arrays.

4. How does NumPy deal with files?

Numpy can efficiently handle ndarray objects by introducing simple file formats. It store all the required information of the file such as data, shape, size, dtype for reconstructing the ndarray in a disk file while retrieving the files on another machine with diferent architecture.

5. Mention the importance of NumPy.empty().

numPy.empty() creates an array without initializing the entries of given shape or type.

---