**Date: -20/12/2023**

**Topics:**

* **NumPy: -**NumPyis a general-purpose array-processing package. It provides a high-performance multidimensional array object and tools for working with these arrays.
* **Features of NumPy**

NumPy has various features including these important ones:

* A powerful N-dimensional array object
* Sophisticated (broadcasting) functions
* Tools for integrating C/C++ and Fortran code
* Useful linear algebra, Fourier transform, and random number capabilities
  + **Big Data: -**Big data describes large and diverse datasets that are huge in volume and also rapidly grow in size over time. Big data is used in machine learning, predictive modeling, and other advanced analytics to solve business problems and make informed decisions.
  + Big data examples

1. Tracking consumer behavior and shopping habits to deliver
2. Monitoring payment patterns and analyzing them against historical customer activity to detect fraud in real time.

