 **NumPy**:

A library for numerical operations, providing support for large, multi-dimensional arrays and matrices, and a range of mathematical functions to operate on them.

It provides support for large, multi-dimensional arrays and matrices, along with a collection of mathematical functions to operate on these arrays efficiently. It is fundamental for scientific computing in Python.

 **TensorFlow**:

An open-source framework for building and training machine learning models, especially deep neural networks.

It facilitates building and training complex neural networks and deep learning models.

 **Keras**:

A high-level neural networks API that simplifies creating and training deep learning models, often used with TensorFlow.

It is use for building and training neural networks, running on top of TensorFlow (or other frameworks). It simplifies the creation and experimentation with deep learning models.

 **PyTorch**:

An open-source deep learning library known for its dynamic computation graphs and ease of use in research and development.

It provides flexibility and dynamic computation graphs, making it popular for research and development in deep learning.

 **Scikit-learn (Sklearn)**:

A library for machine learning that provides simple and efficient tools for data analysis and modeling, including classification, regression, and clustering.

It offers simple and efficient tools for data mining and data analysis. It includes various algorithms for classification, regression, clustering, and dimensionality reduction.

 **Pandas**:

A library for data manipulation and analysis, offering data structures and functions for working with structured data.

It provides data structures and functions needed to work with structured data seamlessly. It offers data manipulation capabilities, including handling of missing data, filtering, and merging datasets.