Search for 5 famous modules in python and write down how to import them and what are they used for:

## 1. NumPy:

NumPy is one of the principal packages in this area. It is intended for processing large multidimensional arrays and matrices, and an extensive collection of high-level mathematical functions and implemented methods makes it possible to perform various operations with these objects.

how to import NumPy?

Download NumPy from: <a href="http://www.scipy.org/Download">http://www.scipy.org/Download</a>

import numpy as np

### 2. SciPy:

based on NumPy and therefore extends its capabilities. SciPy main data structure is again a multidimensional array, implemented by Numpy. The package contains tools that help with solving linear algebra, probability theory, integral calculus and many more tasks.

#### 3. Pandas:

Pandas is a Python library that provides high-level data structures and a vast variety of tools for analysis. The great feature of this package is the ability to translate rather complex operations with data into one or two commands. Pandas contains many built-in methods for grouping, filtering, and combining data, as well as the time-series functionality. All of this is followed by impressive speed indicators.

#### 4. StatsModels:

Statsmodels is a Python module that provides many opportunities for statistical data analysis, such as statistical models estimation, performing statistical tests, etc. With its help, you can implement many machine learning methods and explore different plotting possibilities .The library is continuously developing, enriching new and new opportunities. Thus, this year brought time series improvements and new count models, namely GeneralizedPoisson, zero inflated models, and NegativeBinomialP, and new multivariate methods - factor analysis, MANOVA, and repeated measures within ANOVA

# 5. Plotly:

Plotly is a popular library that allows you to build sophisticated graphics easily. The package is adapted to work in interactive web applications. Among its remarkable visualizations are contour graphics, ternary plots, and 3D charts.