

## Python Advance Assignment 2

1. Explain three-dimensional data indexing.

Ans: Multi dimensional index are formed by multiple search key. It can be in the form of multidimensional array used by complex organizations. Many applications GIS, OLAP requires this to view as existing in a space for two or more dimensions.

2. What's the difference between a series and a dataframe?

Ans: Series is a type of list which can take integer values, string values, double value and more. Series can only contain single list with index, whereas dataframes can be made of more than one series or we can say that a dataframe is a collection of series that can be used to analyse the data.

3. What role does pandas play in data cleaning?

Ans: What is data cleaning? Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabeled.

4. How do you use pandas to make a data frame out of n-dimensional arrays?

Ans: Create a DataFrame from a Numpy array and specify the index column and column headers

Import the Pandas and Numpy modules. Create a Numpy array.

Create list of index values and column values for the DataFrame.

Create the DataFrame

Display the DataFrame

5. Explain notion of pandas plotting.

Ans: Pandas uses the `plot()` method to create diagrams. We can use Pyplot, a submodule of the Matplotlib library to visualize the diagram on the screen. Read more about Matplotlib in our Matplotlib Tutorial.