Python Basics

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- Python features
- Basics
- Function
- Libraries
- Data Preprocessing/Manipulation
- Data Analysis/Plotting

Python features

- Easy and simple to learn
- Run on different platforms
- Easy way of data manipulation, analysis and visualization
- Support of libraries
- Open Source

Basics

- Different IDEs for Python: Atom, PyCharm, Visual Studio Code, Spyder, Jupyter, etc.
- Online Complier: Google Colab, online Python Complier, etc.
- Import libraries to use functions
- No need to define data type of variable
- Normal arithmetic

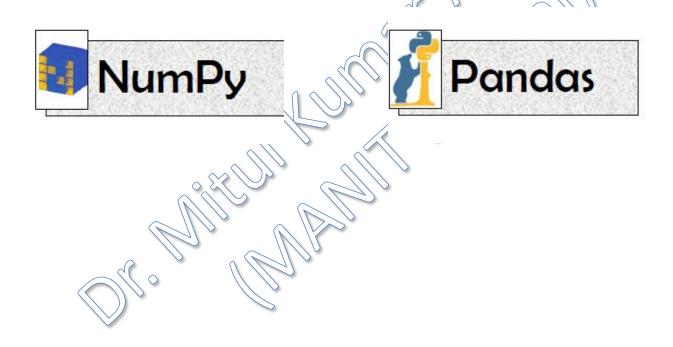
- # Numeric Data Types (Int, Float, Complex)
- # String Data Type
- # List
- # Tuple
- # Dictionary
- # Conditional statements
- # logical AND OR NOT

loops

• # Functions

Libraries

• Main libraries used for Data Science



Numpy

Fundamental package for scientific computing with Python

We will discusses/implement

- Arrays
- Array Creation & Manipulation
- Array Operations

Pandas

 Fundamental package for Data and Data Frame manipulation

We will discuss/Implement

- Creating a Data Frame
- Data Selection, adding & deleting data
- Calculations over data

Data Preprocessing/Manipulation

Numpy

Pandas

Data Analysis/Plotting

matplotlib seaborn

Titanic Dataset (891 x 12)

Passe nger Id	Surviv ed	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embar ked
1	0	3	Braun d, Mr. Owen Harris	male	22.0	1		A/5 21171	7.250 0	NaN	S
2	1	1	Cumin gs, Mrs. John Bradle y	femal e	38.0	1	0	PC 17599	71.28 33	C85	С