"Committed to provide a delightful learning experience"

Course: Data Manipulation through Python

Tools used: Python
Duration: 15 hours (Online)
Pre-requisite: Basic understanding of statistics & python language
Course Fee: INR 6000 only
Timings: 10 am – 1 pm, IST, (Saturday & Sunday)

The core advantage of data is that it tells you something about the world that you didn't know before – Hilary Mason

Hilary Mason

From the desk of Co-Founder & CEO

"Jubilant Greetings,

Core question is 'how to find meaningful and actionable insights from the data? And, for this you really need to wrangle with the data!

This course is designed to take learners to easy-to-use codes through Python's popular libraries like Pandas, Numpy, Matplotlib, Seaborn & Time to name a few for the purpose of finding hidden stories carried by the data of numeric, integer, object & time type. Course covers basic statistical charts and graphs for interesting visualisation.

Wishing you a delightful learning experience.

Dr Vinod"

Course Structure

	Content in brief
Module 1	Installing 'pandas', importing data file. Find shape, data type and information about data/columns/variables. Types of data or variables. Integer (discrete) , Numeric (continuous)and Objects (categorical). Playing with one categorical data. Count chart. Playing with two categorical variables. Cross Tabulation. Interpretation of Chi-Square Test. Knowing one column of integer or numeric data through Descriptive Statistics through Describe function.
Module 2	Setting index in data frame. Renaming a column, Dropping a column, Selecting few columns, Selecting few rows, Sub-setting based on columns and rows, Random Selection of rows, Converting a continuous column into a categorical column, Change data type, Reducing number of categories in a column, Renaming a category, Creating a new variable based on argument/s, Exporting data file.
Module 3	Correlation matrix, Handling Missing Values, Handling Outliers, Adding data through 'append', 'merge', 'join' and, 'map' functions. Replacing Values, 'Apply' functions, Pivot Table in Python.
Module 4	Using numpy for array operations, Transpose, Power in numpy, Multiplication of two matrices. Importing Seaborn, Themes, Colour Palettes, Heatmap, Histogram, Boxplot, Pairplot, Regplot, Barplot, Scatterplot, Jointplot, Default Data Sets in Seaborn, Importing Matplotlib.pyplot, xticks, yticks, title, labels, annotate, figure size, subplot.
Module 5	Handling Time, Day, Week, Month and Year in data. UTC & GMT, 'time' module in python, Current time, Seconds, Minutes, Hours, Days, Weeks, Months, Years between two dates, Date in String to Date Format, 'strptime', Time as pandas series, Normalizing time, Extracting Days, Months and Years from a time series.

Key Features of the Pedagogy

1. Instructions for downloading & installing Jupyter will be provided by the trainer.
2. All concepts will be explained with the help of data sets and commands in Python will be demonstrated in sessions by the trainer.
3. All sessions will be intensively interactive and participants will be encouraged to ask questions.
4. Trainer can be approached after the sessions also for technical queries.