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| **Micro-Program Name** | **Prog\course overview** | **Duration** | **Level** | **Pre – requisite** |
| **Basic Statistics                                  Probability Theory                                 Python IDE** | • Measures of Central tendency • Measures of Dispersion • Skewness and Kurtosis • Events and their Probabilities • Rules of Probability • Conditional Probability and Independence • Distribution of a Random Variable, Moment Generating functions, Central Limit Theorem • Expectation and Variance • Naïve Bayes • What is Python? • Installing Anaconda • Understanding the Spyder Integrated Development Environment (IDE) | 4 hrs               (2 pm - 6pm) | Basic | • Participants should be aware of basic Programming skills • Participants should be aware of Basic maths ( Mean, Median, Mode, Linear Algebra) • Participants should be aware of the Basics of Probability theory |
| **Python basics and string manipulation, Data and information management with python , Data Structures in Python Used for Data Analysis Data Frame Manipulation** | • lists, tuples, dictionaries, variables • learning Python Basics • "Intro to Numpy Arrays • Creating  ndarrays • Indexing • Data Processing using Arrays • File Input and Output • Getting Started with Pandas" • "Data Acquisition(Import & Export) • Indexing • Selection and Filtering • Sorting & Summarizing • Descriptive Statistics • Combining and Merging Data Frames • Removing Duplicates • Discretization and Binning • String Manipulation" | 4 hrs               (2 pm - 6pm) | Basic | • Participants should be aware of basic Programming skills • Participants should be aware of Basic maths ( Mean, Median, Mode, Linear Algebra) • Participants should be aware of the Basics of Probability theory |
| **Visualization Predictive Modelling Tools Linear Regression** | • Line Plots • Bar Charts • Pie Charts • Histograms • Scatter Plots • Parallel Coordinates" • "Intro to Machine Learning • Intro to Sklearn Library and Statsmodels" • "Assumptions • Hypothesis • Variable and Model Significance • Ordinary Least Squares Notion • Regression Table • Anova Table • Multicollinearity • Heteroscedasticity • Model Specification | 4 hrs               (2 pm - 6pm) | Basic | • Participants should be aware of basic Programming skills • Participants should be aware of Basic maths ( Mean, Median, Mode, Linear Algebra) • Participants should be aware of the Basics of Probability theory |