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| **Day** | **Topic** | **Subtopic** |
| day1 | Introduction to Data science and Business analytic | Introduction to DS- stages of BA,why BA and what is BA, tools and process of BA, skills |
| Python for data science | Introduction to anaconda Keyword and identifiers Comments, identationsa and statements Variables and data types in python  Standard input and output  Operators  Control flows: conditional statements Control flow: loops  Control flow: break and continue |
| Data structures:List, Tuples |
| Data structures continues:sets,Dictionary,Strings |
| functions:,Introduction ,Types of functions ,recursive functions,Lamda functions |
| day 2 | modules ,Packages,exception handling ,Debugging python |
| Numerical operations on Numpy,Pandas:,Data frame basics Key operations with data frames |
| SQL | SQL: SQL commands and clauses |
| Data Manipulation | Different kind of data sources and Data Acquisition (Import and Export),Introduction to data manipulation and packages Missing values and treatment |
| Data visualization | Introduction to IRIS dataset,Introduction to different tyes of plot and their advantages and disadvantage |
| day 3 | Statistics and probability | Introduction to statistic  Types of data at high level definition Descriptive and inferential Gaussian/Normal Distribution and its PDF(Probability Density Function)  CDF(Cumulative Distribution function) of Gaussian/Normal distribution  Symmetric distribution, Skewness and Kurtosis Standard normal variate (Z) and standardization Kernel density estimation Sampling distribution & Central Limit theorem Chebyshev’s inequality Discrete and Continuous Uniform distributions Co-variance Confidence interval (C.I) Introduction Hypothesis testing methodology, Null-hypothesis, p-value How to use hypothesis testing? Proportional Sampling |
| day 4 | Machine learning(overview) | Supervised and unsupervised learning  Classification and Regression algorithms  Logistic Regression Liner Regression Decision Tree |
| Creating model from scratch | |