Training Day -2

**Applications of Python:**

**Data Driven Domains**: Data Analytics, Business Analytics,

Data Science, Machine Learning, Deep Learning, Image Processing, Natural Language Processing, Artificial Intelligence, Generative AI

...

Some Other Domains:

**Hardware Specific Applications, Security Domains**: Ethical Hacking,

Network Security, Cyber Security, Networking,

Full Stack Web Development, Mobile Application Development, CAD tools for Electronics, Mechanical, Civil...

**Data Driven :-** Refers To The Practice Of Making Decisions, Strategies, Or Processes That

Are Informed And Guided By Data Analysis And Interpretation, Rather Than Intuition,

Assumptions, Or Purely Qualitative Factors. In A Data-Driven Approach, Objective Data Is Used

As The Foundation To Improve Outcomes, Efficiency, And Accuracy

Full Stack Web Development Domain

Different between Data Analytics and Data Science **Data Analytics: Analysis of data is DA.**

1. Processing a batch of information to get some useful conclusions
2. Making some meaningful conclusions from a raw data.
3. Arranging data in some meaningful or proper way
4. Data Collection in a defined

**Finding important insights from the data.**

1. Requirement Gathering: DARC: Data Analysis Requirement Specification
2. Collection of Data: Google Spreadsheets, Excel, CSV, TSV
3. Pre-processing of data: Bringing the data into some common units
4. Data Cleaning: Removing Outliers, Removing garbage data..
5. Data Visualize and Analyse
6. Data Reporting...

**ML Algo on data and start making the predictions, forecasting, recommendation...**

2014 Elections, who won the game: BJP

2019 Elections, who won the game: BJP

2024 Elections, who won the game: BJP

Why BJP won? Data Analyst: To analyse past data or to find if something happened then why it happened

**“2029 Elections: Who will win the game? Data Scientist”**

**IDE'S USED IN PYTHON DEVELOPMENT:**

IDE: Integrated Development Environment: Software

1. **Pycharm: Python**
2. **Vscode**
3. **Jupyter Notebook**
4. **Spyder**
5. **Google Colab**

Install: Python Install + Pycharm Community Edition Install

Tools used: Pycharm, vscode, ...