# 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, ...