Training Day – 23

Daily Diary on Data Analysis Topics

WHAT IS DATA ANALYTICS?

sets to extract meaningful insights and support decision-making. This process helps businesses and individuals identify patterns, trends, and actionable conclusions from raw data.

* Mathematics and Statistics: Basics of probability, linear algebra, and hypothesis testing.
* Programming: Learn languages like Python which are widely used for data analysis.
* Data Manipulation and Visualization: Master libraries like:
* Python: Pandas, NumPy, Matplotlib, Seaborn
* R: ggplot2,

# Work on Real-Life Projects

* Start small, such as analyzing public datasets on Kaggle or Google Dataset Search.
* Gradually tackle more complex datasets, like financial records or social media metrics

Tools for Data Analytics

1. Data Processing and Analysis o Excel: Good for small-scale analysis.

o Python: Libraries like Pandas, NumPy, and Scikit-learn.

1. Data Visualization o Tableau: Easy-to-use for creating interactive dashboards. o Power BI: Microsoft’s tool for creating visual reports. o Matplotlib and Seaborn: Python-based libraries for visualization.

# \*Topic:\* Introduction to NumPy Variables

* Learned about numpy.ndarray, its creation, and basic properties.
* Example: Created arrays using np.array() and explored their dimensions, shapes, and data types learned Numpy (np) library and some in-built functions of numpy.

Functions like -> astype, size, ndim, dtype, shape, type()

•And also practiced about indexing and slicing of arrays in numpy.



