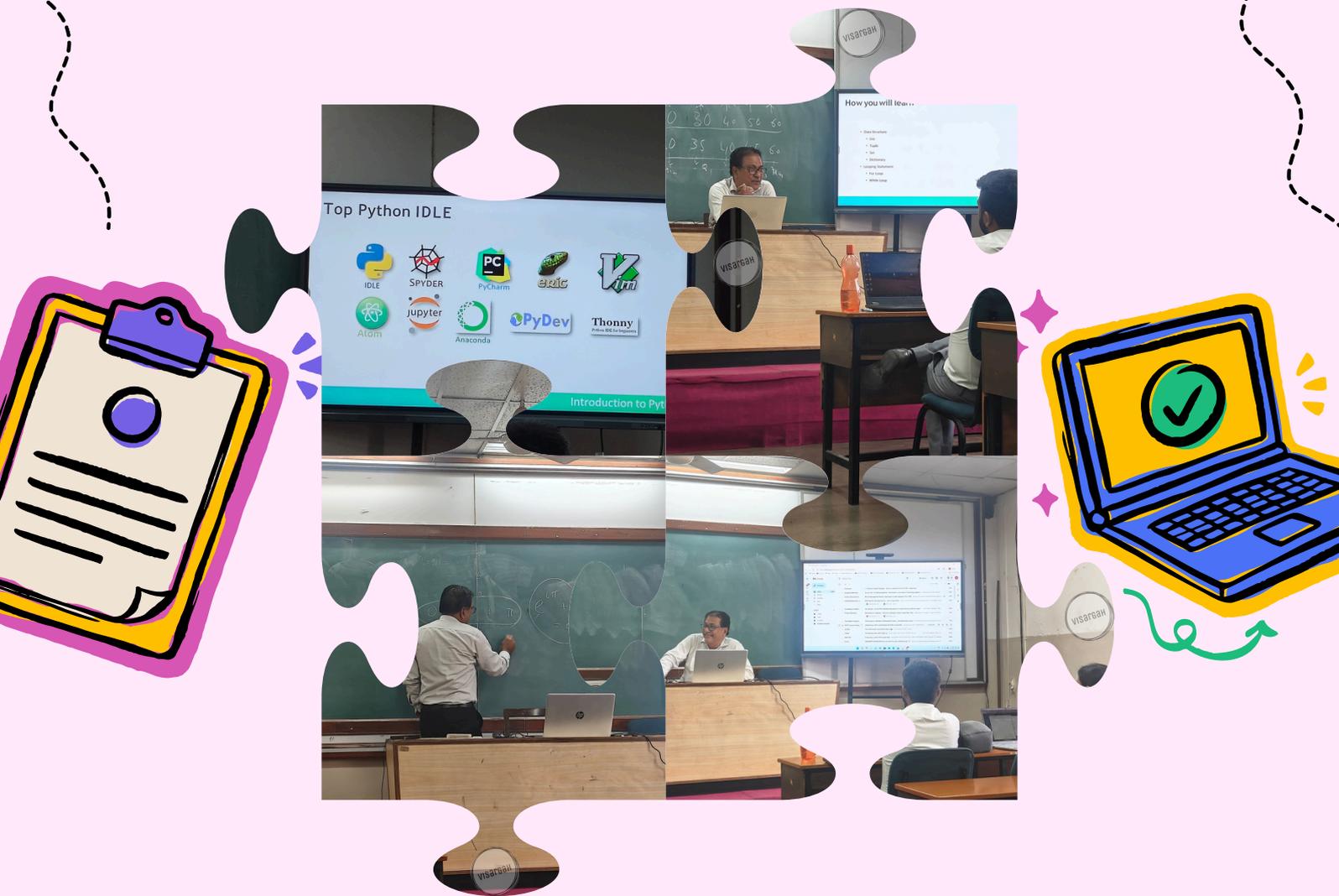# DEPARTMENT OF MBA

INDIAN INSTITUTE OF SOCIAL WELFARE AND BUSINESS MANAGEMENT

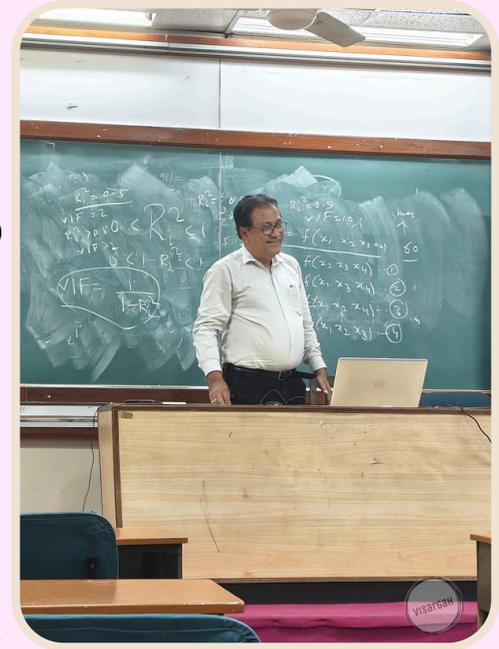**WORKSHOP ON: DATA ANALYSIS USING PYTHON**
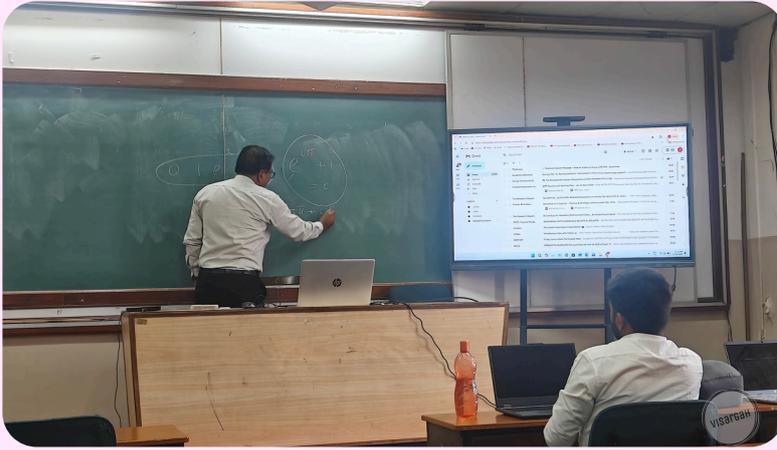
Conducted by: Dr. Gautam Bandyopadhyay

The workshop on **_Data Analysis using Python_**, organized by the Department of MBA (Day) at IISWBM, was an enlightening session led by the distinguished **_Dr. Gautam Bandyopadhyay_**, professor of NIT Durgapur. Dr. Bandyopadhyay's deep expertise in management studies provided a bridge between theoretical statistics and practical data applications.

The session began with an interactive icebreaker where Dr. Bandyopadhyay engaged with our diverse undergraduate backgrounds. He then introduced several proprietary frameworks essential for structured data thinking: **_DDPP, DODO, DOS, WWH_**, and **_PR_**. These acronyms served as a roadmap for the data lifecycle, emphasizing that analysis is not just about coding, but about asking the right questions (WWH) and maintaining Professional Rigor (PR).

A significant portion of the morning was dedicated to the "soul" of data analysis: Statistics. We explored how to validate sample data quality by calculating Standard Deviation. Dr. Bandyopadhyay demonstrated that understanding the spread of data is crucial before any modeling begins. He then transitioned into the technical landscape, explaining why Python remains the dominant backend force for modern applications due to its scalability and vast library ecosystem.

Beyond coding, we were introduced to industry-standard tools like Alteryx for ETL processes and SPSS for complex statistical batch processing. The day culminated in a hands-on Python tutorial. Starting from the basics, we quickly progressed to solving real-world statistical problems using Python scripts. This workshop helped the students gain a clearer perspective on how to transform raw data into actionable business insights.