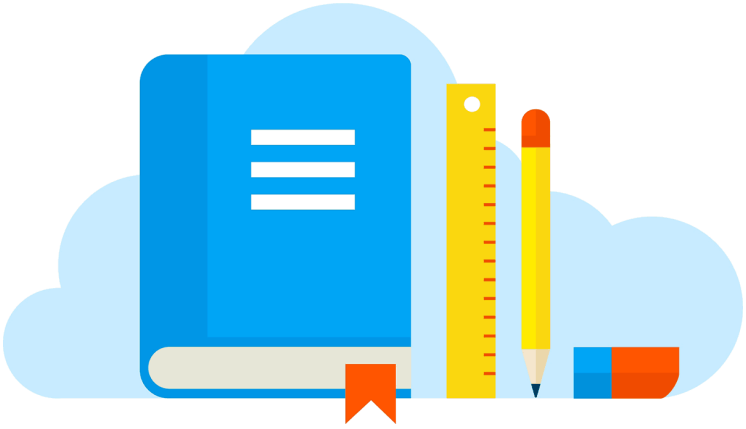


Data Science Notes by Sarowar Ahmed

📊 Chapter: Descriptive Statistics

📊 Topic: Mean, Median, Mode

Hey everyone! Let's dive into the basics of descriptive statistics and understand three fundamental measures: Mean, Median, and Mode.

🎯 Mean: Think of the mean as the "average" we often talk about. It's calculated by adding up all the numbers in a dataset and then dividing by the total number of values. For example, if we have a group of ages: 25, 30, 35, 40, and 45, the mean age would be (25 + 30 + 35 + 40 + 45) / 5 = 35. This gives us a central tendency or a typical value of the dataset.

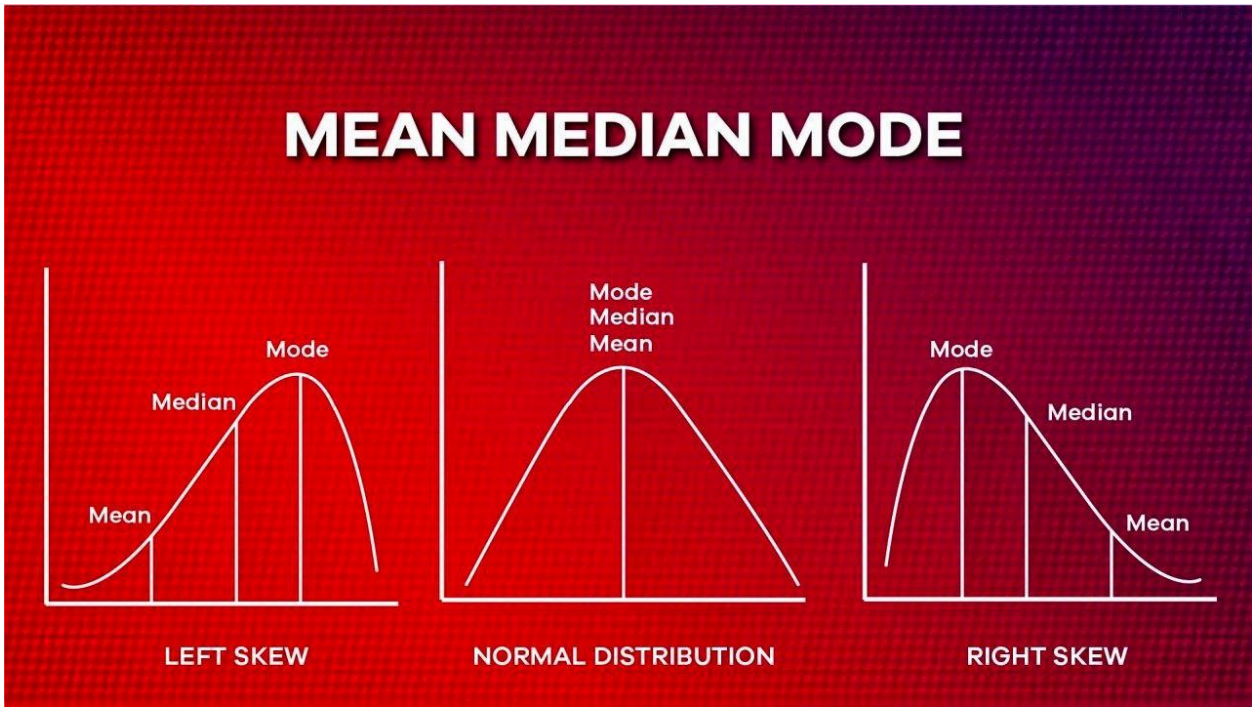
📊 Median: The median is the middle value when a dataset is ordered from smallest to largest. If there is an even number of values, the median is the average of the two middle numbers. Let's say we have a group of test scores: 85, 90, 92, 95, and 98. The

median score would be 92, as it's the middle value. This measure is robust to outliers, making it useful when the data contains extreme values.

🔢 Mode: The mode represents the value that appears most frequently in a dataset. It's like finding the most popular item in a list. For instance, in a set of numbers like 2, 3, 3, 4, 5, 5, 5, the mode would be 5 because it occurs more frequently than any other number. Mode is especially handy when dealing with categorical data or when identifying the most common occurrence in a dataset.

🌟 Why does this matter? Understanding these measures helps us summarize and interpret data effectively. Whether you're analyzing customer demographics, test scores, or sales figures, knowing the mean, median, and mode gives you valuable insights into the central tendencies and distributions of your data.

📈 Here's a simple visualization to help illustrate Mean, Median, and Moder.



Remember, descriptive statistics are like tools in your data analysis toolbox. They provide essential insights into the characteristics of your data, helping you make informed decisions and draw meaningful conclusions.

Got any questions about Mean, Median, or Mode? Feel free to ask me via Linkedin! Let's keep learning together.

My LinkedIn Date: 02/04/2024