

Apple Store Reviews

As a data Analyst you will apply key statistical concepts to analyze a dataset of Apple Store product reviews. Your objective is to perform descriptive and inferential statistical analysis to draw meaningful insights from the data.

Dataset

Link: https://drive.google.com/file/d/1NfhChTBqxuhjY05zsUV0oQjWb0bO18 mD/view?usp=sharing

Perform the Following Statistical Analysis:

- 1. Calculate the mean, median, and mode of the app ratings in the dataset. Which measure (mean, median, or mode) best represents the central tendency of the ratings?
- 2. Find the range and interquartile range (IQR) of the Purchase_Amount in the dataset. How do these values help in understanding the spread of the data?
- 3. Calculate the variance and standard deviation for the number of likes received on reviews. What does the standard deviation indicate about the spread of the data?
- 4. Determine the correlation between the likes and the rating given. Is there a positive, negative, or no correlation between these variables?
- 5. Plot the distribution of the app ratings. Is the distribution positively or negatively skewed? What does this indicate about user satisfaction?
- 6. Perform a hypothesis test to determine if the average rating for Instagram is significantly higher than the average rating for WhatsApp. Use a 95% confidence level.
- 7. Take random samples of ratings from the dataset and calculate their means. Create a sampling distribution and explain how this relates to the Central Limit Theorem.