Summary

1. **Data Import and Preprocessing (Q1):**
   * Imported the user behavior dataset and checked for null values.
   * Explored the column information and descriptive statistics of the data.
   * Handled any missing values or inconsistencies in the dataset.
2. **Analysis of Screen Time and Spending Capacity (Q2 and Q3):**
   * Identified the highest, lowest, and average screen time of all users.
   * Analyzed the distribution of screen time to understand user engagement.
   * Determined the highest, lowest, and average amount spent by all users.
   * Explored the spending patterns of users to identify potential trends.
3. **Relationship Analysis - Active Users vs. Uninstalled Users (Q4):**
   * Investigated the relationship between spending capacity and screen time of active users and uninstalled users.
   * Provided insights into how spending capacity may influence user retention.
4. **Relationship Analysis - Ratings vs. Screen Time (Q5):**
   * Explored the relationship between user ratings and average screen time.
   * Discussed any patterns or correlations observed between ratings and screen time.
5. **User Segmentation with K-means Clustering (Q6 and Q7):**
   * Applied K-means clustering to segment users into three groups: Retained, Needs Attention, and Churn.
   * Visualized the segments based on 'Average Spent on App' and 'Last Visited Minutes'.
   * Provided insights into user behavior patterns and identified clusters for targeted actions.
6. **Summary of Working (Q8):**
   * Utilized K-means clustering to segment users based on their behavior.
   * Identified distinct user groups and visualized the segments for better understanding.
   * Explored relationships between different metrics to gain insights into user engagement and retention.
   * Provided actionable recommendations based on the analysis to improve user retention and enhance user experience.