**Student Guide:** Advanced Excel Formulas and Power Query with Kickstart\_Project Dataset

**Objective:** This exercise is designed to help you apply your knowledge of Excel formulas and Power Query to real-world data analysis problems using the Kickstart\_Project dataset. You will work collaboratively in groups throughout the exercise.

**Materials for Students:**

1. Microsoft Excel (ensure it is installed on your computer)
2. Access to the server for data import:
   * Server: mss-p1-biss-01
   * Database: bissabcanalytics
   * Table: Kickstart\_Project

**Duration:** Approximately 1 hour

**Exercise Steps:**

1. **Introduction** (5 minutes)
   * Listen to the instructor's explanation of the exercise's objectives.
   * Understand that you will be using Power Query to import data, followed by Excel formulas to analyze the Kickstart\_Project dataset.
2. **Data Import and Quick Transformation** (10 minutes)
   * In your groups, use Power Query in Excel to connect to the server and import the Kickstart\_Project table.
   * Perform basic transformations as necessary, such as filtering or sorting, to prepare the data for analysis.
3. **Dataset Overview** (5 minutes)
   * Review the transformed Kickstart\_Project dataset within your group.
   * Familiarize yourselves with the dataset's structure, including columns and data types.
4. **Formula Application and Analysis** (30 minutes)
   * As a group, receive a set of data analysis tasks from the instructor that require the use of Excel formulas (e.g., SUM, AVERAGE, IF, VLOOKUP, INDEX & MATCH, CONCATENATE, etc.).
   * Discuss and understand the tasks as a team.
   * Experiment with Excel functions collectively to complete the tasks and perform a detailed analysis of the results.
   * Draw insights from the data based on your formula applications.
5. **Presentation** (20 minutes)
   * Each group will present their analysis and findings to the class.
   * Explain the steps you took, including data transformation and the formulas used, and the insights gained as a team.
6. **Group Discussion and Feedback** (10 minutes)
   * Engage in discussions with other groups after each presentation.
   * Provide feedback on the accuracy and effectiveness of your peers' formula applications.
   * Ask questions and learn from the approaches of other groups.
7. **Q&A and Recap** (5 minutes)
   * As a class, ask any questions you have about the exercise and receive answers or clarifications.
   * Recap the key Excel formulas, functions, and Power Query techniques used during the exercise.
8. **Conclusion** (5 minutes)
   * Reflect on the importance of teamwork and practical application in using Excel formulas and Power Query, especially when working with real-world datasets.
   * Consider continuing to explore complex data analysis scenarios and expanding your Excel and Power Query skills as a group.

Follow these steps to participate in the exercise and collaboratively apply your Excel formula and Power Query skills to real-world data analysis challenges using the Kickstart\_Project dataset provided.