**Student Guide:** Data Cleaning with Power Query and Shark Attack Dataset

**Objective:** This exercise is designed to help you apply your knowledge of Power Query to clean and prepare a real-world dataset on shark attacks for analysis. 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: Shark\_Attack

**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 and clean the shark attack dataset.
2. **Data Import and Cleaning** (20 minutes)
   * In your groups, use Power Query in Excel to connect to the server and import the Shark\_Attack table.
   * Collaboratively clean the data by performing tasks such as filtering, sorting, removing duplicates, handling missing values, and correcting data types to prepare it for analysis.
3. **Dataset Overview** (10 minutes)
   * Review the cleaned shark attack dataset within your group.
   * Familiarize yourselves with the dataset's structure, including columns and data types, and ensure it is ready for further analysis.
4. **Presentation** (15 minutes)
   * Each group will present their data cleaning process and the resulting dataset to the class.
   * Explain the steps you took to clean the data and the rationale behind your choices.
5. **Group Discussion and Feedback** (10 minutes)
   * Engage in discussions with other groups after each presentation.
   * Provide feedback on the effectiveness of your peers' data cleaning processes.
   * Ask questions and learn from the approaches of other groups.
6. **Q&A and Recap** (5 minutes)
   * As a class, ask any questions you have about the data cleaning exercise and receive answers or clarifications.
   * Recap the key Power Query techniques used during the exercise.
7. **Conclusion** (5 minutes)
   * Reflect on the importance of teamwork and practical application in using Power Query for data cleaning, especially when working with real-world datasets.
   * Consider continuing to explore complex data cleaning scenarios and expanding your Power Query skills as a group.

Follow these steps to participate in the exercise and collaboratively apply your Power Query skills to clean and prepare the shark attack dataset for analysis.