Step-by-Step Process

Preparation of Database Environment

1.1. Data Import: Import the CC and WBS datasets into MySQL. Create two tables, cost\_center\_data and wbs\_data, that mirror the structure of the Excel sheets.

1.2. Column Addition: For both tables, add necessary columns that are equivalent to the blank columns used in Excel for calculations or additional data.

Data Integration

2.1. Joining Tables: Create a SQL join between the cost\_center\_data and wbs\_data tables. This step is equivalent to the VLOOKUP function in Excel. Ensure the join is based on a common unique identifier present in both datasets.

Data Cleaning and Filtering

3.1. Null Value Filtering: Filter out rows in cost\_center\_data where specific columns may have null or #NA values.

3.2. Conditional Row Deletion: Perform row deletions in wbs\_data based on specific criteria, such as matching certain values in the "Cost Element Description".

Data Transformation and Manipulation

4.1. Data Copying: Copy relevant rows from cost\_center\_data to wbs\_data, ensuring that the columns match and the conditions for copying are met.

4.2. Summation and Conditional Deletion: For rows that require summation (e.g., production orders starting with 9), calculate the sum and delete rows based on the result.

4.3. Sorting and Additional Deletion: While MySQL does not support sorting before deletion, use conditional statements to identify and delete rows that meet specific sorting criteria in Excel.

Finalizing and Saving Changes

5.1. Table Renaming: Rename wbs\_data to wbs\_ios\_cc\_data to reflect the merger and processing of data from the CC file.

5.2. Data Backup: After all operations are completed, backup the modified tables.

Post-Processing Activities

6.1. Verification: Ensure that the data in the MySQL tables accurately represents the intended outcome of the Excel-based process.

6.2. Documentation: Document any deviations or additional steps taken during the SQL implementation that were not part of the original Excel process.