**Milestone Four Descriptions**

**Screenshot 1: Tables and Indices Overview**  
This screenshot shows the structure of the ReturnsDB database, including the three main tables: *Customers*, *Products*, and *Returns*. It also displays automatically managed SQLite sequences and the custom indices created to optimize query performance on CustomerID and ProductID.

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**Screenshot 2: Full Return Details Query**  
This screenshot displays a SQL JOIN query that retrieves detailed return records. It combines customer full names, product names, return dates, and reasons. This demonstrates my ability to write multi-table JOIN queries for comprehensive data retrieval and reporting.

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**Screenshot 3: Product Return Counts**  
This query calculates how many times each product has been returned using the COUNT() aggregate function alongside a GROUP BY clause. It highlights basic data aggregation techniques used for analytics and business intelligence.

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**Screenshot 4: Return Reason Frequencies**  
Here, I analyzed the frequency of each return reason and ordered the results in descending order. This query showcases the ability to perform frequency analysis, which is a common requirement in reporting and identifying trends in customer behavior.

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**Screenshot 5: SQLite Sequence Management**  
This screenshot shows the sqlite\_sequence table used by SQLite to manage the auto-incrementing primary keys for tables. It demonstrates understanding of how SQLite handles record ID generation and ensures data integrity.

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**Screenshot 6: Products Table Data**  
This screenshot displays sample data from the *Products* table, showing product IDs, names, and categories. This table provides critical metadata that is linked to the returns through foreign keys, demonstrating relational database design.

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**Screenshot 7: Returns Table Data**  
This screenshot shows sample records from the *Returns* table, including return IDs, associated customer and product IDs, return dates, and return reasons. It illustrates relational integrity and how transactions are stored within the database.

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**Screenshot 8: Indices for Query Optimization**  
This screenshot provides a focused view of the custom indices created on the *Customers* and *Products* tables. These indices are used to optimize the speed and efficiency of JOIN operations and lookups, which is especially important in larger datasets.

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