**README File:**

**Revenue Loss Analysis in Excel: A Comparative Study Using HLOOKUP, VLOOKUP, and XLOOKUP**

**Project Overview**

This project demonstrates a comprehensive analysis of revenue loss due to returned orders using Excel's powerful lookup functions—HLOOKUP, VLOOKUP, and XLOOKUP. By leveraging these functions, we perform a detailed examination of sales data to identify profit losses and analyze these losses based on location, ship mode, and product subcategory.

**Data Used**

The analysis is based on two primary datasets:

* **Orders**: Contains details about the orders placed.
* **Returns**: Contains details about the orders that were returned.

**Objectives**

1. **Revenue Loss Calculation**:
   * Utilize HLOOKUP, VLOOKUP, and XLOOKUP to determine the total revenue loss (profit loss) caused by returned orders.
2. **Data Analysis**:
   * Analyze the lost sales in terms of location, ship mode, and product subcategory.
   * Provide insights on how different factors such as geography, shipping methods, and product types contribute to profit loss.

**Methodology**

1. **HLOOKUP, VLOOKUP, and XLOOKUP**:
   * We applied all three lookup methods to cross-reference the Orders and Returns data, calculating the revenue loss for each returned order.
2. **Data Interpretation**:
   * The analysis includes pivot tables and charts to visualize the impact of returns on profit and sales across different segments.
   * Insights are drawn regarding which locations, ship modes, and product subcategories are most affected by returns.

**Findings**

* **Location-Based Loss**: Identified specific regions where return rates are high, leading to significant profit loss.
* **Ship Mode Analysis**: Examined how different shipping methods correlate with return rates and subsequent revenue loss.
* **Product Subcategory Impact**: Highlighted which product subcategories are most prone to returns and how they affect overall profitability.

**Conclusion**

This project provides a clear comparison of HLOOKUP, VLOOKUP, and XLOOKUP for solving real-world data analysis problems in Excel. It also offers valuable insights into the areas where businesses are losing revenue due to returned orders, enabling better decision-making to minimize future losses.

**Collaboration**

This project was completed independently, with all aspects of the analysis conducted by a single contributor. The final Excel file, containing all answers and analysis, is provided for review.

**How to Use**

1. **Download the Excel File**
2. **Review the Analysis**: Navigate through the different sheets to see how each lookup method was used and the corresponding analysis.
3. **Interpret the Results**: Check out the pivot tables and charts to understand the findings and interpretations.