Please write an original report that provides screenshots of the information requested below. Use a memo format to provide the data to the management of the AdventureWorks company. For each requirement below, copy your original, generated SQL into the appendix of your report.

**Requirements:**

1. Using the AdventureWorksDW2019 dataset, write a SQL WHERE NOT IN query analyzing the German dataset. Management noticed some products are very popular on the web retail channel, but these products are not yet sold in physical stores in Germany. To increase foot traffic into physical stores, you are asked to produce the following lists to identify products sold on the web that are likely to be popular in the physical store retail channel.  
  
Analyzing the data by city level, identify which products sold in Germany are sold on the internet but not in a physical store in that city. Provide a screenshot of the first page from this list.

2. In the same or separate query, produce a list of the TOP 10 products (that are currently not) sold in physical stores, but due to their popularity (high # of units sold in Germany) that should be sold in physical retail stores in Germany (you may choose 1 store, or make a more general recommendation for the entire country).  Add a paragraph to explain your analysis and recommendations.

3. In one of the module documents (page 9 of the Russian dolls vs. House Addition document) a common subquery routine is presented. A base query is used to pull the dimension of interest from one table, then two subqueries are used to provide the summary data (two house additions). This data is turned into a subquery and consumed by a higher-level query that adds a totals column. Finally, a higher-level query is used to format the data differently. (2 Russian doll queries).  
  
Write a query of your own design (provide a screenshot of the results, and place the SQL in the appendix) that performs similar processing. You can write an original query or use the following idea. Write a query that produces totals for bike sales by color (color is in the dimProducts table) and then house addition subqueries to bring in data from the web channel (factInternetSales) and retail channel (factResellerSales). Turn these results into a subquery adding a totals column for each row. Consume these results to add more functionality such as formatting the data from units to percentages (% of total).  
  
Ample examples are provided in the module.   
  
Summary statement: Subqueries are used to 'build up' a dataset step by step.  They solve a lot of query problems, and are a good solution when you do not want to implement arrays (ie more typing)