**1. What is the most salient point between the commonalities and differences of queries formulated in SQL and those expressed in Prolog?**

The most salient commonality is that both SQL and Prolog can be used to specify conditions and criteria for querying data, even in the case of an unknown value in a query.

The most salient difference is their approach to querying the data. SQL is best used with data stored in a relational database as it focuses on data retrieval and manipulation. By contrast, prolog is a logic programming language and is best used for knowledge representation and logical inference.

**2. Did you follow the same 'logic' when writing the queries in both languages?**

As we did the SQL queries first, that process was a foundation for our initial approach to the Prolog queries. However, in the process of creating different rules in the part 2 of the assignment, we began to deviate from the logic we used in part one. We found that in the case of the SQL queries, it was easier to work backwards in some cases (find which tables are needed to answer the query, then determine the JOIN or WHERE). In the case of the Prolog queries, it was important to come up with foundational rules first to build our queries off of.

**3. What are the differences between the way the "data" and the "queries" are represented in SQL?**

In SQL, data is represented as information and is organized in tables with rows and columns. Queries in SQL will find, add, update, or remove information from the table and then present the data. Using specific queries allows us to join other tables and represent this joint information. The difference between the data and queries is data is about the information stored, while queries are used to help find, add, delete, or update the data within the table.

**4. What are the differences between the way the "data" and the**

**"rules/queries" are represented in Prolog?**

In Prolog, data is represented as “facts”. These facts are used to tell Prolog that this information is always true.

For example, facts can show the different employees, salary from each employee, department of each employee, and supervisor of each employee. Rules and queries are similar to finding data from SQL, but in Prolog, they are used to tell if the connection between the facts can be proven to be true. These rules and queries are represented using predicates with logical conditions to define relationships and then poses these assertions or questions to Prolog. For example, we had query where we find who the supreme chief of the fictional company, and once we found the supreme leader to be James, when putting the query function with the name james supreme\_chief(james)., prolog will show it’s true.

**Part 1 Screenshots**

**A screenshot of a computer program

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**A screenshot of a computer program

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**A screenshot of a computer code

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**A screenshot of a computer program

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**Part 2 Screenshots**

**A screenshot of a computer program

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