Qlik Sense Data Architect Certification Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What is the function of the Unless prefix in QlikView scripting?

- **A. To force execution of specific commands**
- **B. Create a conditional clause determining command execution**
- **C. Store temporary results during execution**
- **D. Change the data source for an existing table**

2. What does the Mid function do in string manipulation?

- **A. Converts the string to upper case**
- **B. Returns a substring starting at a specified character**
- **C. Replaces a search string with a replacement string**
- **D. Returns the substring found between two texts**

3. What is the purpose of the generic prefix in Qlik Sense?

- **A. To create a single table of concatenated data**
- **B. To unpack a tall table into one field per attribute value**
- **C. To optimize load times for larger datasets**
- **D. To merge unrelated data tables**

4. What type of schema utilizes one or more fact tables with dimensions in a Snowflake format?

- **A. Normalized Model**
- **B. Denormalized Model**
- **C. Hybrid Model**
- **D. Relational Model**

5. What is the purpose of defining access in Qlik Sense?

- **A. To restrict applications to only selected users**
- **B. To track user activity**
- **C. To increase data integrity**
- **D. To enhance user collaboration**

6. What describes a Perfect Key in a data model?

- **A. Every row contains a key value and values can be duplicate**
- **B. Every row contains a key value and all the key values are unique**
- **C. Not every row contains a key value and values can be unique**
- **D. All key values are identical across rows**

7. What does a Subset Ratio indicate in a data model?

- **A. The correlation between distinct values in a single table and the entire model**
- **B. The overall size of a table compared to other tables**
- **C. The average size of the rows in a table**
- **D. The total number of keys in a model**

8. What is the first step in the ETL Data Architecture process?

- **A. Transform**
- **B. Load**
- **C. Extract**
- **D. Aggregate**

9. What does the hierarchy prefix facilitate?

- **A. Transforming non-table data formats**
- **B. Creating superior sorting mechanisms**
- **C. Transforming parent-child hierarchy tables for modeling**
- **D. Aggregating hierarchical data efficiently**

10. What characterizes the process of concatenating tables?

- **A. Combining unrelated data sets**
- **B. Only selecting non-active fields**
- **C. Common fields are 100% populated and used for many shared dimensions**
- **D. Excluding duplicate entries**

Answers

1. B
2. B
3. B
4. A
5. A
6. B
7. A
8. C
9. C
10. C

Explanations

1. What is the function of the Unless prefix in QlikView scripting?

A. To force execution of specific commands

B. Create a conditional clause determining command execution

C. Store temporary results during execution

D. Change the data source for an existing table

The Unless prefix in QlikView scripting is designed to create a conditional clause that determines whether a certain command should be executed or not. When the condition specified in the Unless statement evaluates to true, the subsequent commands following the Unless prefix will not be executed. This allows developers to control the flow of execution within scripts effectively, making it possible to skip commands under certain conditions, thereby enhancing the script's logic and efficiency. For instance, if you have a script that loads data from a database and you want to skip that load based on certain criteria (like the existence of a certain record or the state of a variable), using the Unless prefix allows you to implement that logic succinctly. This capacity to conditionally execute commands is integral in data processing tasks within QlikView, ensuring that actions are taken only when appropriate conditions are met, ultimately supporting better data integrity and processing reliability. The other options reflect functionalities that are not associated with the Unless prefix. For example, the functionalities of forcing command execution, storing temporary results, or changing data sources pertain to different aspects of QlikView scripting and do not accurately describe the purpose or use of the Unless prefix.

2. What does the Mid function do in string manipulation?

A. Converts the string to upper case

B. Returns a substring starting at a specified character

C. Replaces a search string with a replacement string

D. Returns the substring found between two texts

The Mid function is used in string manipulation to extract a portion of a string starting from a specified position. This function allows users to specify the starting character and the length of the substring they want to extract. For example, if you have a string "Hello World" and you want to retrieve the word "World," you can use the Mid function to start extracting from the 7th character and continue for the length of the word "World." This functionality is particularly useful when you need to parse or work with specific sections of a string, such as extracting information from formatted data or when needing to perform operations on selected text based on its position within a larger string.

3. What is the purpose of the generic prefix in Qlik Sense?

A. To create a single table of concatenated data

B. To unpack a tall table into one field per attribute value

C. To optimize load times for larger datasets

D. To merge unrelated data tables

The generic prefix in Qlik Sense is specifically designed to unpack a tall table into one field per attribute value. When using the generic prefix, each unique attribute value in the source data is transformed into separate fields, allowing for a more structured representation of the data. This approach is particularly useful for scenarios where data is organized in a vertical format, often referred to as a tall or skinny table, where each attribute is represented as a row. By utilizing the generic prefix, the resulting dataset becomes easier to analyze and visualize, as it translates vertically stacked data into a more accessible format. This transformation enhances clarity and usability within applications, making it a valuable tool for data architects and analysts working with diverse datasets. Other options, while relevant in the broader context of data manipulation, do not accurately describe the function of the generic prefix. For instance, the first choice involves concatenating data into a single table, which is a different process not specifically addressed by the generic prefix. Similarly, optimizing load times relates more to performance enhancements rather than the structural transformation implied by the generic prefix. Lastly, merging unrelated data tables does not capture the essence of unpacking tall tables into structured fields. Thus, the identification of the generic prefix's role in unpacking tall tables accurately reflects its

4. What type of schema utilizes one or more fact tables with dimensions in a Snowflake format?

A. Normalized Model

B. Denormalized Model

C. Hybrid Model

D. Relational Model

A normalized model is designed to minimize redundancy and dependency by organizing data into multiple related tables. In the context of a snowflake schema, this involves using one or more fact tables that contain quantitative data, and dimension tables that are further normalized into multiple related tables. The snowflake schema is characterized by having dimension tables that can be subdivided into additional tables, allowing for a more organized and efficient structure. This is beneficial for reducing data redundancy and maintaining integrity, which are key principles of normalization. In contrast, a denormalized model would combine multiple dimension tables into a single table to improve query performance, often at the cost of data redundancy. A hybrid model may incorporate aspects of both, while a relational model is a broader term that encompasses various types of data organization, including both normalized and denormalized approaches, without specifically referring to the snowflake structure itself.

5. What is the purpose of defining access in Qlik Sense?

A. To restrict applications to only selected users

B. To track user activity

C. To increase data integrity

D. To enhance user collaboration

Defining access in Qlik Sense primarily serves the purpose of restricting applications to only selected users. This access control mechanism ensures that sensitive or proprietary information is available only to those who have the appropriate permissions, thereby maintaining data security and compliance with governance policies. By managing user access rights, data architects can prevent unauthorized users from viewing or interacting with data that they should not have access to, ensuring that the right people are accessing the right data. This strategic approach not only protects sensitive information but also enhances the overall management of data within an organization. Implementing effective access controls fosters trust in data handling practices and enables organizations to control who can create, edit, and view applications, which is critical for maintaining an organized and secure data environment.

6. What describes a Perfect Key in a data model?

A. Every row contains a key value and values can be duplicate

B. Every row contains a key value and all the key values are unique

C. Not every row contains a key value and values can be unique

D. All key values are identical across rows

A Perfect Key in a data model refers to a situation where every row in a table has a unique identifier that distinctly identifies each record. This concept is critical for establishing relationships between tables and ensuring that each row can be retrieved without ambiguity. The reason the selected answer is correct is that it emphasizes the necessity for uniqueness in the key values across the rows. When every row contains a unique key value, it ensures that there are no duplicates. This uniqueness allows for efficient data retrieval, prevents data redundancy, and ensures the integrity of relationships within the data model. In contrast, other options reflect characteristics that would undermine the function of a Perfect Key. For instance, if key values were allowed to be duplicate, as stated in one of the other choices, it would complicate data relationships and potentially lead to confusion when defining associations in the data model. The presence of non-unique or missing key values would also negate the concept of a Perfect Key, as it would not guarantee that each row can be uniquely identified and linked reliably to other tables in the model. Thus, the defining trait of a Perfect Key is that every row has a unique key value, clearly capturing the essence of what constitutes a well-structured data model.

7. What does a Subset Ratio indicate in a data model?

A. The correlation between distinct values in a single table and the entire model

B. The overall size of a table compared to other tables

C. The average size of the rows in a table

D. The total number of keys in a model

A Subset Ratio in a data model is a metric that signifies the relationship between distinct values present in a particular table and how those values correspond to the entire model. It essentially reflects how many unique values from a specified table can be found when considering the total unique values across all tables in the data model. When analyzing data relationships, understanding the distinct values in a single table can provide insights into the level of granularity and uniqueness of data captured in that table. The subset ratio thus helps in assessing data quality, potential duplications, and the efficiency of joins within the data model. The other options do not accurately describe the function of the subset ratio. While the size of a table or rows may be relevant for performance, they do not relate to the correlation or distinctness of values. Similarly, counting keys in a model provides a different measure of complexity but does not address the ratio aspect concerning distinct values and their relationship to the entire dataset.

8. What is the first step in the ETL Data Architecture process?

A. Transform

B. Load

C. Extract

D. Aggregate

The first step in the ETL (Extract, Transform, Load) Data Architecture process is extracting the necessary data from various sources. During this phase, relevant data is collected from multiple databases, applications, or data warehouses. This step is crucial because it sets the foundation for the entire ETL process. Data extraction involves retrieving the data in a raw form without any alterations, ensuring that all necessary information is gathered before it undergoes any transformations or loads. Starting with the extraction phase allows architects and data engineers to assess the quality, format, and structure of the data that will be worked on in subsequent steps. Once data is successfully extracted, it will be transformed into a suitable format for analysis and then loaded into a destination system, such as a data warehouse. This clear sequence emphasizes the importance of data extraction as an initial preparatory step, which is essential for ensuring that quality data is utilized within the ETL pipeline.

9. What does the hierarchy prefix facilitate?

A. Transforming non-table data formats

B. Creating superior sorting mechanisms

C. Transforming parent-child hierarchy tables for modeling

D. Aggregating hierarchical data efficiently

The hierarchy prefix is particularly associated with transforming parent-child hierarchy tables for modeling purposes. In data modeling, a parent-child hierarchy is one where data entities are related in a tree structure, where each entity (child) has a direct relationship pointing back to a parent entity. This type of relationship is common in organizational structures, product categories, or any other type of nested categorization. By using hierarchy prefixes in Qlik Sense, you can effectively manage and model these complex relationships, allowing the data to be structured in a way that reflects the hierarchical relationships. This transformation facilitates the representation of data in a more understandable manner, enabling clearer insights and analysis. While the other options may touch on relevant data processing topics, they do not specifically address the unique function that the hierarchy prefix serves in managing parent-child relationships within data modeling. This makes the correct choice particularly important for proper data management and visualization in hierarchical structures.

10. What characterizes the process of concatenating tables?

A. Combining unrelated data sets

B. Only selecting non-active fields

C. Common fields are 100% populated and used for many shared dimensions

D. Excluding duplicate entries

The process of concatenating tables in Qlik Sense is characterized by combining data sets that share common fields and dimensions. When tables are concatenated, particularly in a star schema environment, it's crucial that the common fields are populated consistently across the tables to maintain data integrity and make the resulting data model effective for analysis. By ensuring that common fields are 100% populated, analysts can use these shared dimensions for accurate aggregation and reporting. Creating a cohesive data model where shared dimensions are fully populated allows for seamless integration of data across the tables. This leads to more effective interaction within the Qlik Sense application, enabling users to derive insights from a consolidated view of data. The other options don't accurately capture the essence of table concatenation. Combining unrelated datasets does not typically involve concatenation, as it suggests a lack of shared context, while selecting only non-active fields focuses on field usage rather than the relationships between tables. Excluding duplicate entries is more related to data cleaning processes rather than the act of concatenating tables, which can retain duplicate entries if they exist in the original data sets. Thus, the focus on fully populated common fields in shared dimensions directly ties into the concept of effective concatenation of tables.