Congratulations! You passed!
Grade received 100%To pass 80% or higher

To pass this practice quiz, you must receive at least 80%, or 4 out of 5 points, by completing the activity and answering corresponding quiz questions. Once you have comple quiz, review the feedback statements. You can learn more about the graded and practice items in the course overview.

Activity Overview

In this activity, you will examine a schema and evaluate it using a schema validation checklist. You will complete this step in your role as a business intelligence professional need to ensure that data is properly transformed and moved into a database.

Scenario

Review the following scenario. Then complete the step-by-step instructions.

Your coworker moved data from several tables into your database using a data pipeline. You notice that there are some inconsistencies between the source data and the data destination (your database). In this activity, you will use a schema validation checklist to evaluate the schema and figure out where the inconsistencies are. Then, you will ans quiz questions.

Step-By-Step Instructions

Follow the instructions to complete the activity and answer the quiz questions that follow. After you complete the quiz, you can compare your answers to the feedback provide

Step 1: Access the schema

To use the schema for this course item, click the following link and select *Use Template*.

Link to schema: Database schema

OR

If you don't have a Google account, you can download the template directly from the following attachment.

Activity Template_ Database schema
PPTX File

Step 2: Review the schema

Review the schema's tables and column titles. This database schema contains eight tables: Sales Fact, Shipments, Billing, Order Items, Product, Product Price, Order Details, Customer, which are connected via keys.

The central table is Sales Fact. The foreign keys in the Sales Fact table link to the other tables as follows:

order_sid" key links to the Order Items, Order Details, Shipments, and Billing tables

customer_sid" links to Order Details; "order_item_sid" links to Order Items, Shipments, and Billing

shipment_sid" links to Shipments; and "billing_sid" links to Billing

product_id" from the Product table links to Order Items and Product Price

The Customer table currently doesn't have any links to other tables. It contains the following columns: "customer_sid," "customer_name," and "customer_type."

Step 3: Evaluate the schema

What to Include in Your Response

Be sure to address the following criteria in your completed activity:

Verify that the schema's keys are still valid or determine the reason they aren't.

Verify that the schema's table relationships have been preserved or determine the reason they weren't.

Verify that the schema's conventions are consistent or determine the reason they aren't.

1. Did you complete this activity?
   - ○ No
   - ◉ Yes

   Correct
   Thank you for completing this activity! Validating your schema is an essential part of ensuring that your database properly reflects the relationships of the data you moved through your pipeline. Review the quiz feedback to find out how you did.

2. The *Shipments* table is missing a relationship to another table. Which table should it connect to?
   - ○ Product
   - ○ Sales Fact
   - ◉ Order Items
   - ○ Order Details

   Correct
   The *Shipments* table is missing a relationship to the *Order Items* table. They should be connected by the order_sid and order_item_sid dimensions.

3. Which of the following is a convention used in this schema?
   - ○ Abbreviating customer as "cust"
   - ○ Alphabetizing each dimension name
   - ○ Including the order_sid dimension in every table
   - ◉ Abbreviating system id as "sid"

   Correct
   Abbreviating system id as "sid" is an example of a convention used in this schema. Conventions can help you better understand dimension names and must be consistent across each table in a schema.

4. You find an error while trying to connect the *Product* table to the *Order Items* table. Which problem(s) would prevent the schema from validating? Select all that apply.
   - ☑ The data type of the product ids in the *Product table* is an integer, but it's a string in the *Order Items* table.

Correct
Problems that would prevent a schema from validating include if there are ids that exist in one table but not the other or if the data types of two corresponding columns from two tables do not match.

- [ ] The product_id name does not match product_sid.
- [ ] The *Product* table has fewer columns than the *Order Items* table
- [x] There are product ids in the *Order Items* table that don't exist in the *Product* table.

Correct
Problems that would prevent a schema from validating include if there are ids that exist in one table but not the other or if the data types of two corresponding columns from two tables do not match.

5. The *Customer* table should be linked to which of the following tables? Select all that apply.

- [x] Sales Fact

Correct
The *Customer* table should be linked to the *Sales Fact* and *Order Details* tables because they share the customer_sid dimension.

- [ ] Billing
- [x] Order Details

Correct
The *Customer* table should be linked to the *Sales Fact* and *Order Details* tables because they share the customer_sid dimension.

- [ ] Order Items