

Introduction to DB SQL

Answer Guide

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DAWD 01-5 - Lab: Tables and Views on Databricks SQL

Question/Answer 1

```
USE replace_with_your_schema_name;
DROP TABLE IF EXISTS sales_external;
CREATE EXTERNAL TABLE sales_external USING DELTA
  LOCATION 'wasbs://courseware@dbacademy.blob.core.windows.net/data-analysis-with-databricks/v01/sales/';
SELECT * FROM sales_external ORDER BY customer_id;
```

What is the value of customer_id in the first row?

12096776

Question/Answer 2 - REQUIRES RENAMING THE TABLE

```
USE replace_with_your_schema_name;
CREATE TABLE sales_renamed USING DELTA AS
  SELECT * FROM sales_external;
DESCRIBE EXTENDED sales_renamed;
```

What is the value of Owner?

root

Question/Answer 3

Under History, what was the operation associated with Version 0 of the table?

CREATE OR REPLACE TABLE AS SELECT is HTML right answer

CREATE TABLE AS SELECT is incorrectly shown as the correct answer

Question/Answer 4

Did the 'DESCRIBE' command fail? (yes or no)

YES

DAWD 02-3 - Lab: Ingesting Data

Question/Answer 1

How many rows are in the customers table? (type only numbers)

28813

Question/Answer 2

```
USE replace_with_your_schema_name;
CREATE OR REPLACE TABLE sales_stream (5minutes STRING,
  clicked_items ARRAY<ARRAY<STRING>>,
  customer_id STRING,
  customer_name STRING,
  datetime STRING,
  hour BIGINT,
  minute BIGINT,
  number_of_line_items STRING,
  order_datetime STRING,
  order_number BIGINT,
  ordered_products ARRAY<ARRAY<STRING>>,
  sales_person DOUBLE,
  ship_to_address STRING
);
```

```
COPY INTO sales_stream
FROM
'wasb://courseware@dbacademy.blob.core.windows.net/data-analysis-with-databricks/v01/sales_stream.json'
FILEFORMAT = JSON;
SELECT * FROM sales_stream ORDER BY customer_id;
```

What is the value of customer_id in the first row?
10060379

Question/Answer 3

How many privileges does the group "users" have on sales_stream?
1

Question/Answer 4

How many privileges have you been granted to you on your schema?
6

DAWD 02-6 - Lab: Basic SQL

Question/Answer 1

```
USE replace_with_your_schema_name;
SELECT loyalty_segment, count(loyalty_segment) AS Count
FROM customers
GROUP BY loyalty_segment
ORDER BY loyalty_segment;
```

How many customers are in loyalty_segment 0?
11097

Question/Answer 2

```
USE replace_with_your_schema_name;
SELECT initcap(customer_name) AS Customer_Name
FROM customers
ORDER BY customer_name DESC;
```

What is the last name of the last customer (alphabetically) in the table? Ensure answer is in lower case
zyskowski

Question/Answer 3

```
USE replace_with_your_schema_name;
UPDATE customers SET customer_name = initcap(customer_name);
SELECT * FROM customers;
```

In which city is Bittner Engineering, Inc. located?
RANDOLPH

Question/Answer 4

```
USE replace_with_your_schema_name;
```

```
INSERT INTO loyalty_segments
(loyalty_segment_id, loyalty_segment_description, unit_threshold, valid_from, valid_to)
VALUES
(5, 'level_5', 130, current_date(), Null);
SELECT * FROM loyalty_segments;
```

How many rows are in the table now?

5

If you did the optional lab on Basic SQL, the correct answer is 6

Question/Answer 5

```
USE replace_with_your_schema_name;
CREATE OR REPLACE TABLE high_value_CA_customers AS
SELECT *
FROM customers
WHERE state = 'CA'
AND loyalty_segment = 3;
SELECT * FROM high_value_CA_customers;
```

How many rows are in the view?

949

Question/Answer 6

```
USE replace_with_your_schema_name;
SELECT customers.state, sum(total_price) AS Total FROM customers
JOIN sales
ON customers.customer_id = sales.customer_id
GROUP BY customers.state
ORDER BY Total DESC;
```

Which state has the highest sales?

OR

Question/Answer 7

```
USE replace_with_your_schema_name;
SELECT min(total_price)
FROM sales;
```

What is the lowest price? (numbers only)

18

DAWD 03-3 - Lab: Data Visualizations and Dashboards

Question/Answer 1

Which product category has the highest upper fence?

Opple

Question/Answer 2 !!!NEED TO INCLUDE THE % SIGN AS PART OF ANSWER!!!

What is the %Max for Orders?

6.77%

Question/Answer 3

Which product category has the lowest minimum price?
Rony

DAWD 03-5 - Lab: Notifying Stakeholders

Question/Answer 1

What is the shortest amount of time we can configure for query refreshes?
1 minute

Question/Answer 2

What is the total amount of income (in whole dollars) currently in the sales_stream table? (type only numbers)
249003 or 265759

Question/Answer 3

After sharing the dashboard with the "All Users" group, how many rows of users and groups are in the "Manage permissions" dialog?
2

Question/Answer 4

When you click "Advanced" under the "Refresh" drop down, how many minutes are selected by default? (enter only numbers)
10

DAWD 03-6 - Lab: Final Lab Assignment

Question/Answer 1

```
USE replace_with_your_schema_name;  
DROP TABLE IF EXISTS sales_orders_json;  
CREATE TABLE sales_orders_json  
  USING JSON  
  OPTIONS (  
    path 'wasb://courseware@dbacademy.blob.core.windows.net/data-analysis-with-databricks/v01/sales_orders',  
    header "true",  
    inferSchema "true"  
  );  
DROP TABLE IF EXISTS sales_orders;  
CREATE TABLE sales_orders AS  
  SELECT * FROM sales_orders_json;  
DROP TABLE IF EXISTS sales_orders_json;  
SELECT * FROM sales_orders;
```

How many rows are in the sales_orders table? (type only numbers)
4074

Question/Answer 2

```
USE replace_with_your_schema_name;  
WITH order_info AS  
  (SELECT customer_id, explode(ordered_products) AS product_info FROM sales_orders),
```

```
total_sales AS
  (SELECT customer_id, sum(product_info["price"] * product_info["qty"]) AS total_spent FROM order_info GROUP
  BY customer_id)
SELECT customer_name, total_spent FROM total_sales
  JOIN customers
    ON customers.customer_id = total_sales.customer_id
  WHERE total_spent > 175000
  ORDER BY total_spent DESC;
```

How much has Bradsworth Digital Solutions, Inc spent?
209533

Question/Answer 3

```
USE replace_with_your_schema_name;
WITH sold_products AS
  (SELECT *, explode(ordered_products) as products FROM sales_orders
    JOIN customers
      ON customers.customer_id = sales_orders.customer_id
    JOIN loyalty_segments
      ON customers.loyalty_segment = loyalty_segments.loyalty_segment_id)
SELECT loyalty_segment_description, sum(products["price"] * products["qty"]) AS sales FROM sold_products
  GROUP BY loyalty_segment_description;
```

What is the sales amount for customers in loyalty segment 3?
9910450

Question/Answer 4

What is the name of the right-most tab in the Bar visualization editor?
Data labels

Question/Answer 5

Will this Alert trigger even though there is no refresh schedule configured for the query itself?
Yes

Question/Answer 6

If you wanted to configure a set interval to refresh this dashboard automatically, what button would you click?
Schedule