Modern Big Data Analysis with SQL

Coursera Specialisation (Offered by Cloudera)

Course-2: Analysing Big Data with SQL

Week-2: Core

Question-1: Which is the best description of the SELECT statement in SQL? (Note, this is not referring to the SELECT list.)

Answer-1: The only statement for creating query results

Question-2: Which of the following can be achieved using a SELECT statement with Hive or Impala? Check all that apply.

Answer-2: Displaying the data in a table using a specific order for the columns

- Listing all the data in a table
- Displaying specific columns in a table
- Displaying the output of an expression

Question-3: The customers table in the default database has columns cust_id, name, and country (all string types). Which of the following are valid SELECT statements?

Answer-3: SELECT * FROM customers;

SELECT 'Brendon';

SELECT name, cust_id FROM customers;

Question-4: This SELECT statement returns one result. What is the result? SELECT 3 + 2 * 5; Answer-4: 13

Question-5: The result of DESCRIBE fun.games; gives this result:

name	type	comment
id	int	
name	string	
inventor	string	
year	string	
min_age	tinyint	
min_players	tinyint	
max_players	tinyint	
list_price	decimal(5,2)	

Assume you are using Impala, which does not implicitly cast data types. Which of the following are valid to use in a SELECT list for this table?

Answer-5: inventor

- min players-min age
- min players, list price
- ceil(list_price + 0.08*list_price)

Question-6: Consider this query:

SELECT game, shop, price, round(0.08*price,2) AS tax FROM fun.inventory; Which are the correct column names in the header of the result set for this guery?

Answer-6: game, shop, price, tax

Question-7: This SELECT statement returns one result. What is the result? SELECT floor(5 - 6.5);

Answer-7: -2

Question-8: Suppose you want to calculate when each game in the fun.games table celebrated its 10th anniversary. (For information about this table, see the result of the DESCRIBE statement in Problem 5 above.) You might try the following query, but using Impala, it will cause an error:

SELECT year + 10 FROM fun.games;

Which of the following would correct the error and make the calculation correctly? Check all that apply.

Answer-8: SELECT cast(year AS INT) + 10 FROM fun.games;

Question-9: The statement DESCRIBE workforce; has the following result:

name	type	comment
name	string	
occupation	string	
salary	int	

Which is the best statement to get a list of the occupations used in the table? Answer-9: SELECT DISTINCT occupation FROM workforce;

Question-10: You are working in the default database and want to list all the data in the crayons table, which is in the wax database. Which of the following allow you to do that? Check all that apply.

Answer-10: SELECT * FROM wax.crayons;

Change the current database to wax and run SELECT * FROM crayons;

Question-11: Which of the following are true of keywords (such as SELECT and FROM) and identifiers (such as names of tables and columns) in Hive and Impala? Check all that apply.

Answer-11: Keywords are always case-insensitive

By convention, keywords are often shown uppercase