Snowpro Core 출제 된 문제

1. Orgadmin로 할 수 있는 작업

Options: Create account, Delete Account Data, Edit Account Data, View usage of all account

Answer: Create account, View usage of all account

2. Zero-copy Cloning: User A가 User B의 Schema를 Cloning으로 overwrite 했을 때, User B의 Schema를 다시 복구 할 수 있는 방법

Answer: Rename cloned schema and then undrop schema

3. Manage Grants 권한이 적용 된 레벨

Options: Global, Database. Schema, Table

Answer: Global

4. Choose a well-clustered table from 4 different diagrams

Answer: The one that spread micro-partitions horizontally without overlaps

5. Directory Table 관련 질문

File URL, Presigned URL, Scoped URL를 generate하는 방법, 용도 및 Access 기간

Directory Table Query result 및 output columns

6. Data type

Find synonymous data type of Float

Options: Decimal, Double, Number, Numeric, Real

Answer: Double, Real

7. Semi-structure load/unload 지원 file format

Unload: Json, Parquet

Load: ORC, Parquet, Json, Avro, XML

8. Snowflake에서 enforcing하는 Constraints

Options: Not Null, Unique, Primary, Foreign key

Answer: Not Null

9. File format이 여러 location에서 사용 되었을 때 가장 우선 순위로 적용되는 것

Options: Table, Stage, Copy Into Table 등…

Answer: Copy Into Table

10. Transient table의 데이터가 자주 변경 되는 데, 3일전의 데이터로 복구할 수 있는 방법

Answer: Transient table의 max 보관기간이 1 day이기때문에 3일전 데이터로 변경 불가능

11. 질문에서 나왔던 Account Usage View 종류:

Access History, Login History, Table\_storage\_metrics

12. 각 테이블의 Fail Safe storage 사용량을 확인 할 수 있는 방법

기억나는 options: Show tables, Table\_storage\_metrics in Information Schema/Account Usage

Answer: Table\_storage\_metrics in Information Schema/Account Usage

13. From clause 에서 사용할 수 있는 object

UDF, UDTF, Stored procedure 등

Answer: UDTF

14. Sharing 할 수 있는 objects type

Table, Secure View, Secure UDF, External Table

15. Multi-cluster warehouse scaling policy 이해

Auto-scaling vs Maximized mode

16. Snowflake architecture 및 Micropartition 저장 방식의 대한 질문

Multi-cluster shared data

Compressed columnar format

17. Stage 명령어

Put, Get

List

18. Improving performance of table

Clustering

19.Search Optimization

20. Table에서 Cluster key를 제거하는 방법

Option 1: Alter Table <table\_name> DELETE clustering key;

Option 2: Alter Table <table\_name> DROP clustering key;

Option 3: Alter Table <table\_name> REMOVE clustering key;

Answer: Alter Table <table\_name> DROP clustering key;

21. Snowflake Stored Procedure Javascript애서 지원하는 delimiter 캐릭터

“”

‘’

//

\\

$$

Answer: ‘’ (Single quote), $$

22. Snowflake SQL variable 캐릭터

$

&

@

#

Answer: $

1. Secure view 생성 후 일반 뷰로 변경 가능한지?

Alter viw set secure/ unset secure

1. Database clone시 stored procedure 구현 방식
2. Scale up시 WAIT\_FOR\_COMPLETION = TRUE 사용하면?

TRUE: The ALTER WAREHOUSE command will block until the warehouse resize completes.

FALSE: The ALTER WAREHOUSE command returns immediately, before the warehouse resize completes.

1. Org로 묶을 수 있는 account(다른 리전, 다른 CSP 가능?)

Yes

1. Marketplace 데이터를 개인 snowflake 계정에서 clone 또는 복사하는 것이 가능한가?

The following actions are not supported:

Creating a clone of a shared database or any schemas/tables in the database.

Time Travel for a shared database or any schemas/tables in the database.

Editing the comments for a shared database.

1. Sharing에서 consumer가 provider와 에디션이 다르다면?

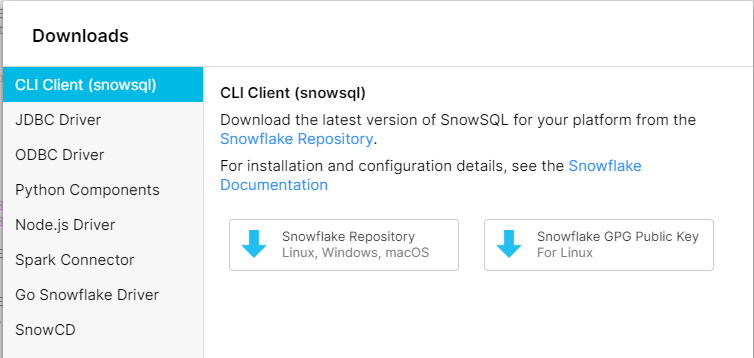
By default, Snowflake does not allow sharing data from a Business Critical to a non-Business Critical account. For more information, see Data sharing and Business critical accounts.

Snowflake provides the OVERRIDE SHARE RESTRICTIONS global privilege which is granted to the ACCOUNTADMIN role by default.

The OVERRIDE SHARE RESTRICTIONS global privilege can be granted to other roles (system-defined or custom). Then, users with the role can enable/disable the SHARE\_RESTRICTIONS parameter for their provider account.

1. UI에서 제공하는 Connector 종류

<https://docs.snowflake.com/en/user-guide/snowflake-client-repository>



CJOPNGOSS.

8. 현재 연결에서 사용중인 driver 확인하고 싶으면? CURRENT\_CLIENT

9. 네트워크 이슈 있을 때 확인할 수 있는 툴? SnowCD

10. ACCESS\_HISTORY, METERING\_HISTORY 등의 view에 대한 문제

12. Search optimzation 적용시 table에 대한 ownership/modify 권한 중 어떤 것이 있어야 하나? OWNERSHIP / ADD SEARCH OPTIMIZATION

Have OWNERSHIP privilege on the table.

Have ADD SEARCH OPTIMIZATION privilege on the schema that contains the table.

13. Sampling시 BERNOULLI|ROW 방식을 쓴다면?

14. Role에 대한 문제

15. Scale out policy에 대한 문제

16. 암호키 순환 주기 : 30일

17. snowflake가 지원하는 인증 방식, federated/Okta

18. Network Policy 적용 대상 : Account/User

19. Directory table SELECT 방법

20. directory table에서 url 가져올 때 인증과정이 필요없는 url 방식은? presigned url??

21. semi-structured 데이터 로딩시 가져올 수 있는 snowflake 데이터 타입

22. FLATTEN 함수/OBJECT\_CONSTRUCT 함수에 대한 문제

23. ‘Byte spilled to local storage’ 이슈가 의미하는 바

24. COPY INTO, VALIDATION\_MODE에서 쓸 수 있는 옵션들

25. 여러개의 파일로 unload하고 싶을때 써야하는 파라미터

1. MFA (duo mobile, duo security)

2. Sample(0) -> empty  
3. Reader account 확인 -> show managed accounts  
4. Share  
5. Marketplace  
6. Cloud Service Layer  
7. Loading or Unloading file formats 종류  
8. Micro Partition size (16MB)  
9. multi-cluster (Standard vs Economy)  
10. Zero-copy cloning  
11. search optimization  
12. external function  
13. snowflake architecture (shared disk)  
14. stored procedure  
15. LATERAL FLATTEN 사용시 출력되는 컬럼  
16. Rest API  
17. SnowCD -> Network connectivity analyze  
18. bytes spilled to local storage  
19. what happen when turn off the session during query is running  
20. object that record DML changes -> streams

Additional

Which type of Snowflake partner is Fivetran? => Data integration

Snowpark support pushdown -> DDL,DML, DCL, UDFs

Snowpark data abstraction => Dataframe

Snowpark support language => Python, Java, Scalar

Stored procedure support language => Java, Python, Scalar, Snowflake Scripting, Javascript

In classic web interface, enclosing character for a stored procedure => single quote, Double dollar Signs

Snowflake snowsight web suppot visualization => Bar Charts, Line Charts, Heat Grids, Scorecard

UI query history => 14 days

How many schemas can be created in the Snowflake database?

T=> there is no hard limit

Temporary table sysnonym => Global temporary, Local Temporary, Volatile

TIME DATA => HH:MI:SS

TIME FRACTION SECONDS => FF9

DEFALUT ACCOUNT IN ORGANIZATION => 25

Future grants cannot be defined on objects like => External function, Policiy object, Tag

There is no limit of the number of network policies in Snowflake by administroaor

Netwokr policy can be activated on Account, User level.

Network policy can be created by SECURITYADMIN, higher SECURITYADMIN, role with global CREATE NETWORK POLICY

User has to install Duo mobile application for MFA

동영상 List :

1: <https://www.youtube.com/watch?v=ajhLLBGyeDM&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF>

4번부터

Snowflake ACCOUNTADMIN can disable MFA temporarily as well as permanently for a user.

MFA login is designed primarily for connecting to Snowflake through the web interface.

MFA login fully supported by SnowSQL in Snowflake.

MFA login form connecting to Snowflake => Web, JDBC, ODBC, Snowsql

Securable object => An entity to which access can be granted

5번부터

<https://www.youtube.com/watch?v=-tJFBnc9n_w&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=5>

to let a warehouse run all the time=> 0, null

session can have only one warehouse at a time for executing a query.

In case of failure server => 50%.

6번 <https://www.youtube.com/watch?v=QMUIW8OtI6c&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=6>

M-partitions 50M-500M (no compression)

SYSTEM$CLUSTERING\_DEPTH

SYSTEM$CLUSTERING\_INFORMATION

7번<https://www.youtube.com/watch?v=AdESTexG7QA&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=7>

MV can’t be undropped.

8번 <https://www.youtube.com/watch?v=ynpOs_TvprA&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=8>

CLONE => standard, enterprice, business ciritical, Virtual Private Clound.

The clone keyword can not be used for the pipe object, however, when you clone a schema or databases, pipe gets cloned automatically.

Pipe, Stream & Task are the three objects that need ownership role to be cloned.

Usage role is for any other objects like sequence and file format. Table needs select privilege.

Cloned pipes referring to external stage => stoped\_cloned state

The clone inherites the reference from the source object with fully qualified name like database.schema.reference\_object

Cloned task in db or schema => Suspended status default

Cloned objects inherit the parameter vale set at account level by default. If a parameter is explicitly set on a source database, schema, or table, the object clone inherits the override value in accordance with the inheritance hierarchy for the parameter.

User stages and internal named stages can not be cloned. Table stage and external stages okay.

9 번 : <https://www.youtube.com/watch?v=MhOIfrg5iJM&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=9>

Any full snowflake account can be provider and consumer at the same time. You can share any number of objects with other consumer and vise-sersa.

Objects can be shared => Standard, Transient tables, External tables, Secure vies, Secure MVs, Secure UDFs(O) but

Standard Views(X)

To create shared objects => Mush have accountadmin

A share contains USAGE privileges on the database & the schema to be shared, privileges on the tables, secure views which will be shared and the consumer account(s) to which the share will be available.

Account to account direct share is enabled for standard, enterprise & business critical editions of snowflake.

The number of consumer for a direct share is unlimited

The mxximum number of consumer can be created by provider account is 100.

VPS is not allowed to share or to be shared “Share data”.

10 번 : <https://www.youtube.com/watch?v=a8-pXxFLMFM&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=10>

Creates a new stream with the same definition as the source stream. The clone inherits the current offset.

Stream can not be shared.

Stream support Time Travel with At|Before clause

Stream on directory table, The metadata$row\_id column values in the stream output are empty.

MAX\_DATA\_EXTENSION\_TIME\_IN\_DAYS

11번(TASK) : <https://www.youtube.com/watch?v=re3Vn1C3yOc&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=11>

A task can have Child tasks up to : 100

To create task => CREATE TAKS privilege is needed for the role.

To execute task => global EXECUTE TASK privilege is needed for the role and the role also have to has the privileges to run the query inside the query.

Task tree => all the task in the task tree should be in the same schema.

TASK can be cloned.

TASK operate privilege => to suspend, rusume

Task supports all session parameter but not user and account parameters.

ACCOUNT can have 10,000 resumed task.

A simple tree of tasks is limited to a maximum of 1,000 task total.

All tasks in a simple tree must have the same task owner.

12번(Stream & Task) : <https://www.youtube.com/watch?v=4DUnt9mWews&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=12>

Task can check whether there is data in stream with SYSTEm$STREAM\_HAS\_DATA function.

SYSTEm$STREAM\_HAS\_DATA to avoid false negative (ie, returning a false value even when the stream contains changed data); however, the function is not guaranteed to avoid false positive(ie. Returning a true value when the stream contains no changed data).

13번 (RBAC) : <https://www.youtube.com/watch?v=0eo14P-8S5s&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=13>

Public role is now listed with this command “Show grant to user <user-name>”;

14번 (Stored procedure) : <https://www.youtube.com/watch?v=hE4VhRSVxEA&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=14>

Stored procedure support language => java, scalar, python, javascript, snowflake scripting.

If return value is not specified in procedure body it returns null

Javascript stored procedure body size limit to 100KB(recommendation)

Snowflake Scripting wile be default language unless it was not specified.

Javascript exceptiong handling : Error code//message/state/StrackTrace.

Snowflake object is accessible by default to the Javascript SP.

Stored procedure can not be administered in t Classci UI

15번 (Resource Monitor):

<https://www.youtube.com/watch?v=v_HGfXsGnIc&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=15>

Not set for monitor level => the state DORMANT

Weekly, Monthly, Yearly, Never. 🡺 Scheduling unit.

Without schedule parameter, the default value => Monthly

Notytify actions can be defineed five times with a resource monitor.

“NOTIFY & SUSPEND” action can be defined one time in a resource monitor.

NOTIFY & SUSPEND-IMMEDIATE can be defined one time in a resource monitor.

16번 (Query Optimization Service)

<https://www.youtube.com/watch?v=3GOijncZVhM&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=16>

Search Optimization Service => Enterpisze, Business Critical, VPS

Search Optimizaitn Service is table level property.

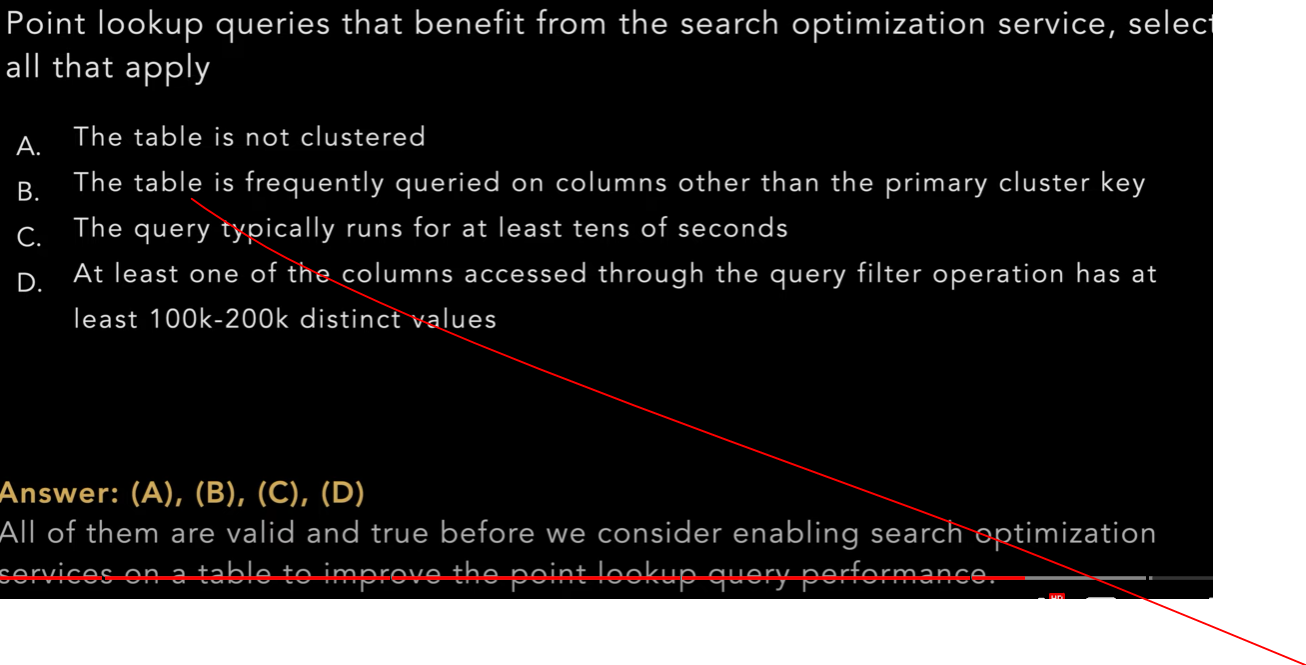
To add or remove search optimization which role? => Ownership or ADD SERARCH OPTIMIZATION.

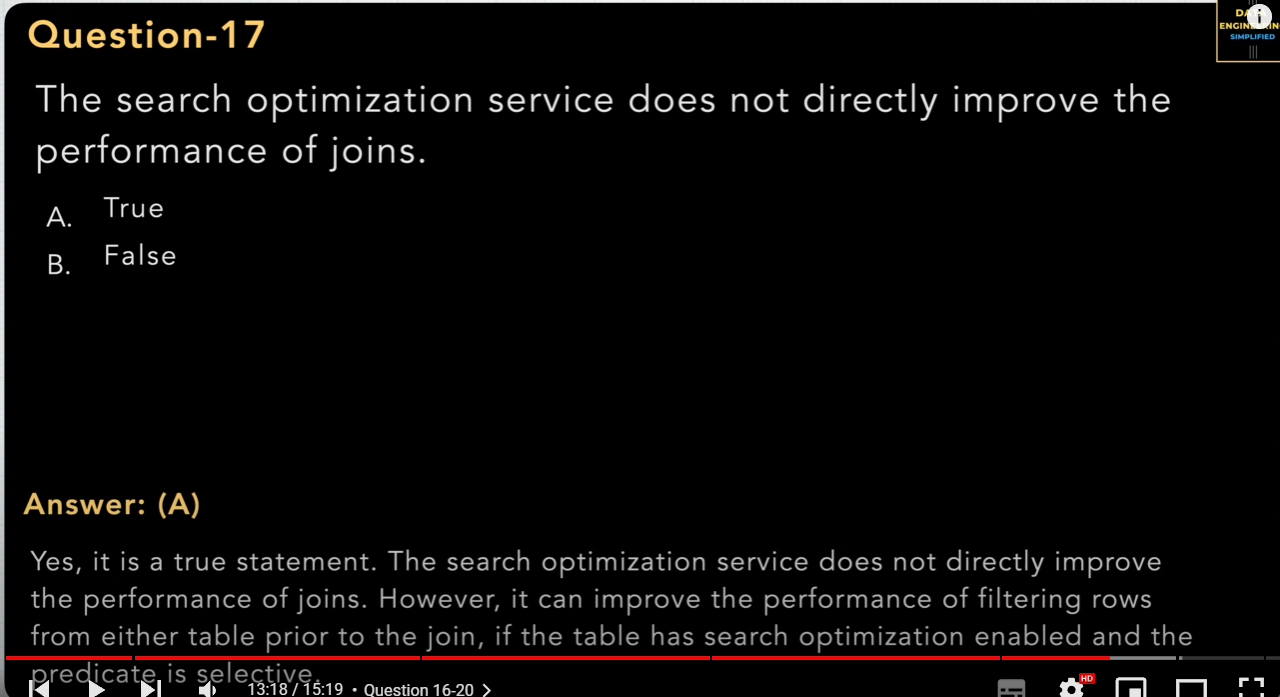
Search optimization does not support external tables.

Search optimization support equality and in predicate

Search optimization support data type => Integer, Date, Time &Timestammp, Varchar, Binary.

Search optimization can’t be controlled by user, but automatically optimizer.



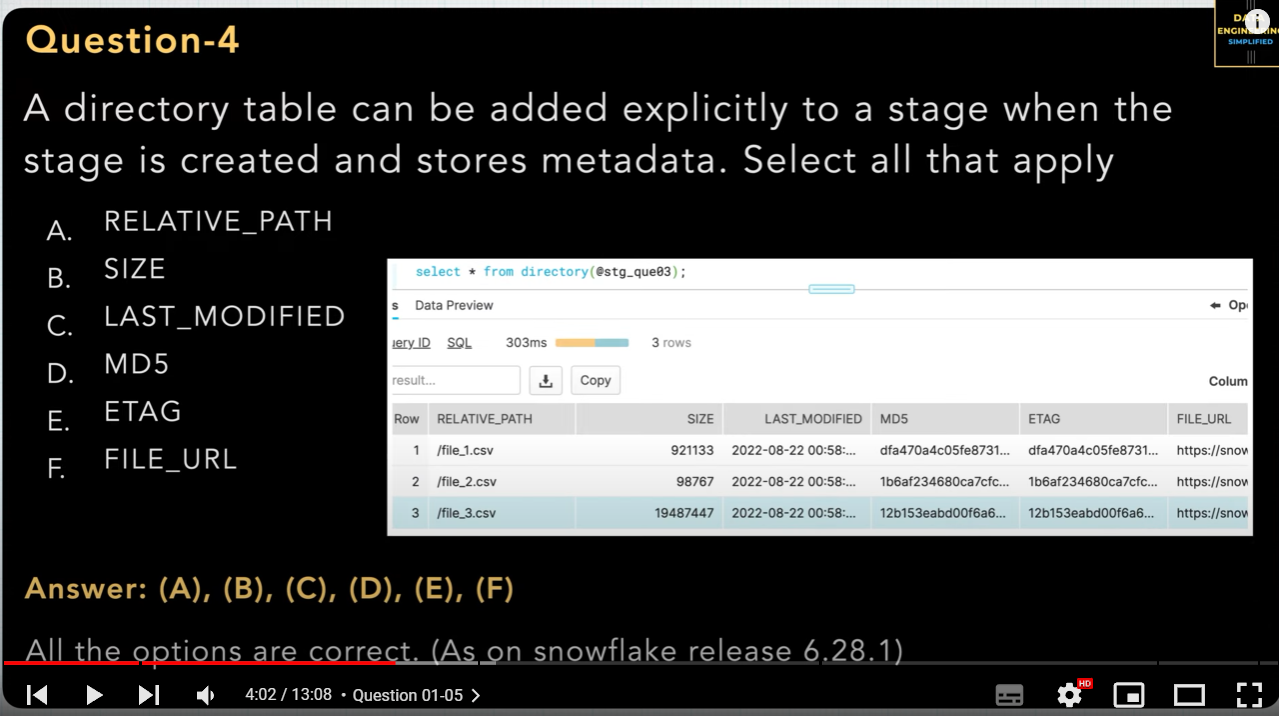


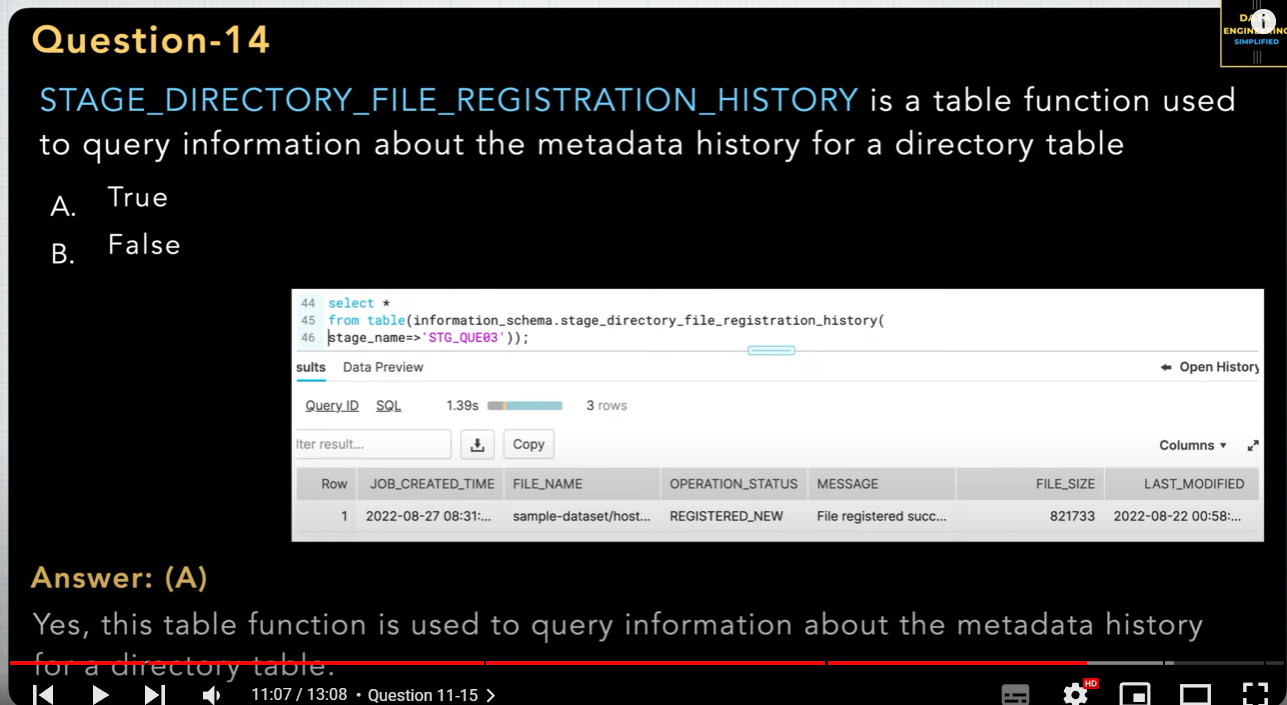
17번(Directory table):

<https://www.youtube.com/watch?v=ygE1CWz4BYw&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=17>

Directory table support only named stage(internal, external)

Directory=(enable=true);





18번 (SQL File Function) :

<https://www.youtube.com/watch?v=2t_N8De8lZU&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=18>

GET\_STAGE\_LOCATION need this privilege for the state => USAGE, READ

GET\_PRESIGNED\_URL and BULD\_SCOPED\_FILE\_URL => non-deterministic

BULD\_SCOPED\_FILE\_URL’s expired time(default) 3600 secs, 1hour

19번 (Drivers & Ecosystem) :

<https://www.youtube.com/watch?v=sD1wmGEnx3g&list=PLba2xJ7yxHB5X2CMe7qZZu-V4LxNE1HbF&index=19>

JDBC type-4, higher 1.8, 64bit

NODE.JS PUT => 1.6.2 GET => 1.6.6

ODBC

AZURE 2.17.5

GOODGLE 2.21.5

MS Azure 2.20.2

