USE ROLE SYSADMIN;

USE WAREHOUSE DKWHXS;

USE SCHEMA USECASE\_DB.OBJECT\_TAGGING;

CREATE OR REPLACE MASKING POLICY USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK

as (VAL STRING) RETURNS STRING ->

CASE WHEN current\_role() = 'ACCOUNTADMIN' THEN val

ELSE NULL

END;

DESC MASKING POLICY USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK;

CREATE OR REPLACE TAG USECASE\_DB.OBJECT\_TAGGING.PII\_TYPE;

alter tag USECASE\_DB.OBJECT\_TAGGING.PII\_TYPE

add allowed\_values 'SSN';

SHOW TAGS IN SCHEMA USECASE\_DB.OBJECT\_TAGGING;

select \* from snowflake.account\_usage.tags

order by tag\_name;

select system$get\_tag('USECASE\_DB.OBJECT\_TAGGING.PII\_TYPE', 'USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO', 'table');

USE ROLE DATA\_ENGINEER;

CREATE OR REPLACE TABLE USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO(employee\_id number,employee\_ssn string);

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (1,'111-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (2,'222-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (3,'333-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (4,'444-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (5,'555-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (6,'666-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (7,'777-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (8,'888-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (9,'999-11-1111');

insert into USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO values (10,'000-11-1111');

ALTER TABLE USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO modify column employee\_ssn set tag USECASE\_DB.OBJECT\_TAGGING.PII\_TYPE = 'SSN';

select \* From USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO;

select \* from table(USECASE\_DB.information\_schema.policy\_references('USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK'));

with column\_with\_tag as

(

select object\_name as table\_name,

column\_name column\_name,

object\_database table\_db\_name,

object\_schema table\_schema\_name

-- from snowflake.account\_usage.tag\_references

from table(USECASE\_DB.information\_schema.tag\_references('USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO.EMPLOYEE\_SSN', 'column'))

-- where tag\_name = 'PII\_TYPE' and tag\_value='SSN' and tag\_database='USECASE\_DB' and tag\_schema = 'OBJECT\_TAGGING'

),

column\_with\_policy as

(

select ref\_entity\_name table\_name,

ref\_column\_name column\_name,

ref\_database\_name table\_db\_name,

ref\_schema\_name table\_schema\_name

from table(USECASE\_DB.information\_schema.policy\_references('USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK'))

)

select \* from column\_with\_tag

except

SELECT \* FROM column\_with\_policy;

ALTER TABLE USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO MODIFY COLUMN EMPLOYEE\_SSN SET MASKING POLICY USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK;

SELECT \* FROM USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO;

USE ROLE DATA\_ENGINEER;

SELECT \* FROM USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO;

USE ROLE ACCOUNTADMIN;

SELECT \* FROM USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO;

USE ROLE SYSADMIN;

SELECT \* FROM USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO;

--

select \* from table(USECASE\_DB.information\_schema.policy\_references('USECASE\_DB.OBJECT\_TAGGING.SSN\_MASK'));

select \* from table(USECASE\_DB.information\_schema.tag\_references('USECASE\_DB.OBJECT\_TAGGING.EMPLOYEE\_INFO.EMPLOYEE\_SSN', 'column'));

select system$get\_tag\_allowed\_values('USECASE\_DB.OBJECT\_TAGGING.PII\_TYPE');