Data Classification

In this experiment, we will learn to use Snowflake’s privacy recommendations function.

1. Create a sample data and table with ID, Social Security number, Age and Credit Card

```
USE ROLE ACCOUNTADMIN;

CREATE OR REPLACE DATABASE SNOWTEST;
CREATE OR REPLACE SCHEMA SNOWTEST.DATA_CLASS;
CREATE OR REPLACE TABLE SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL(
   ID VARCHAR(10)
   , SSN VARCHAR(11)
   , AGE NUMERIC
   , CREDIT_CARD VARCHAR(19)
);
```

2. Let's enter some fake sensitive data

```
INSERT INTO SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL VALUES
('A0000001','234-45-6477',24,'4053-0495-0394-0494');
INSERT INTO SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL VALUES
('A0000002','234-85-6477',24,'4653-0495-0394-0494');
INSERT INTO SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL VALUES
('A0000003','235-45-6477',24,'4053-0755-0394-0494');
```

3. Looking at the table values

```
SELECT *
FROM SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL;
```

4. Run EXTRACT_SEMANTIC_CATEGORIES to analyze the columns in the table

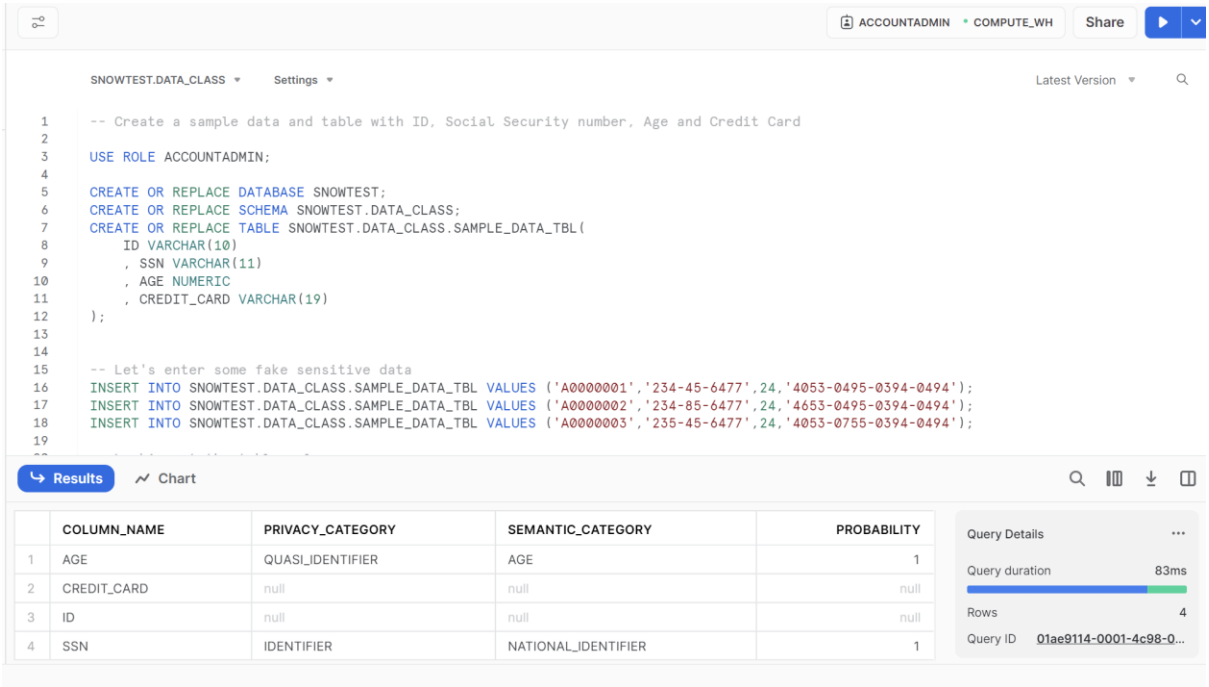
```
SELECT
EXTRACT_SEMANTIC_CATEGORIES('SNOWTEST.DATA_CLASS.SAMPLE_DAT
A_TBL');
```

5. The results will be in JSON format. We can flatten to analysis the recommendations

```
CREATE OR REPLACE TABLE SNOWTEST.DATA_CLASS.CLASSIFICATIONS
AS
select t.key::varchar as column_name,
    t.value:"recommendation".privacy_category::varchar as privacy_category,
    t.value:"recommendation".semantic_category::varchar as semantic_category,
    t.value:"recommendation".coverage::numeric as probability
from table(
        flatten(
            extract_semantic_categories(
                'SNOWTEST.DATA_CLASS.SAMPLE_DATA_TBL'
            )::variant
        )
    ) as t
;
```

6. We can then use this table to review the recommendation and create object tags accordingly

```
SELECT * FROM SNOWTEST.DATA_CLASS.CLASSIFICATIONS;
```



7. Clear Resources

```
DROP DATABASE SNOWTEST;
```