

SQL 101

Exercise 1

DDL STATEMENTS

- ❑ Create a file format that can read a CSV file from your local laptop
- ❑ Create an ACCT_2023 table in your sandbox by loading the acct.csv file from your laptop to snowflake
- ❑ Copy CUST_2023 and TRXN_2023 tables from **HRDW_DB_COLLAB.LAB_TRAINING** to your sandbox(SB.USER_ABC123)

Exercise 2

DDL STATEMENTS

- ❑ Add a new column COUNTRY (varchar (3)) to the CUST_2023 table
- ❑ Create a TRANS view of the TRXN_2023 table with only TRXN_ID and TRXN_AMT data
- ❑ Drop the TRXN_2023 table
- ❑ Undrop TRXN_2023 table

Exercise 3

SELECT STATEMENTS

- ❑ Write a SELECT statement to get all the columns from the CUST_2023 table
- ❑ Write a statement that will select only the CUST_NAME column from the CUST_2023 table
- ❑ Select all unique values in the STATE column from the CUST_2023 table

Exercise 4

USING THE WHERE CLAUSE

- ❑ Using CUST_2023 table list only the customers from the state - Virginia
- ❑ List all customers except the customers from New York
- ❑ Display only records of customers from ALBANY, OR
- ❑ Display customers either from VA or PA

Exercise 5

USING ORDER BY CLAUSE

- ❑ Show the records in CUST_2023 table sorted by state
- ❑ Show the records in CUST_2023 table sorted in reverse order by customer name
- ❑ Show the records in CUST_2023 table sorted by State and then by city in each state

Exercise 6

WORKING WITH NULL VALUES

- ❑ Display all records from CUST_2023 table where the HOME_PHN_NUM column is null
- ❑ Display all records from CUST_2023 table where the WORK_PHN_NUM column is not null
- ❑ Display a new column Country_New with NULL COUNTRY values replaced with word “Missing”

Exercise 7

USING RANGES AND SETS

- ❑ Show all customers from the states CA, GA, IA, LA, MA, PA, VA and WA
- ❑ Show all customers from states other than CA, GA, IA, LA, MA, PA, VA and WA
- ❑ Show all accounts where the transaction amount range from \$5000 to \$6000, inclusive
- ❑ Show all customers whose first name is alphabetically between 'A' and 'C', inclusive (1238 rows)

Exercise 8

USING BUILT IN SQL FUNCTIONS

- ❑ Find the smallest and largest transaction amounts from the TRXN_2023 table
- ❑ How many customers are from VA?
- ❑ What is the average of the transactions in 2020 from the TRXN_2023 table?
- ❑ What is the transactions total in 2021 from TRXN_2023 table?
- ❑ Produce an output with customer's address line 1 and address line 2 separated by a comma and space in between

Exercise 9

AGGREGATIONS

- ❑ List the number of accounts under each card_type
- ❑ List the minimum, maximum and average transaction amounts of the acct_id=1281249461 in 2020 and 2021
- ❑ List only the first letter of customers name as well as how often they occur

Exercise 10

LIKES AND WILDCARDS

- ☐ Show all customers whose name starts with 'D'
- ☐ Show all customers whose name ends with 'r' or 'R'
- ☐ Show all customers whose name contains the letter 'k' or 'K'
- ☐ Show all customers whose name starts with 'A' and ends with 'r'

LIKES AND WILDCARDS, CONT.

- ☐ Show all customers whose name doesn't start with 'P'
- ☐ Show all customers where the second letter of their name is 'v' or 'V'
- ☐ Use the 'UPPER' or 'LOWER' commands to show all customers with a first name of 'Crystal' regardless of how the letters are formatted.

Exercise 11

DATE FUNCTIONS

- ❑ List today's date
- ❑ Show the date: 05.31.1999 (in MM.DD.YYYY format) in snowflake format
- ❑ Show all the accounts where ACCT_OPEN_DT occurred in the last 1500 days
- ❑ How many accounts were opened in each QUARTER irrespective of the year
- ❑ For how many months, on average, has each account been open for?

Exercise 12

INSERT AND DELETE STATEMENTS

- ❑ Insert a new record into CUST_2023 table with your name and sample cust_id
- ❑ Delete the row that you just inserted

UPDATE STATEMENTS

- ❑ Update the City to 'Boston' for all records in the CUST_2023 table, but only when the state is 'MA'
- ❑ Update the City to 'St. Louis' and the COUNTRY to 'USA' for all records in the CUST_2023 table, only when STATE is 'MO'
- ❑ Update the COUNTRY to 'USA' for all records in the CUST_2023 table, when the state is in US and all others records to 'CAN' (Canada) when canada province is present - make all records 'Missing' when no state or state doesn't fall under USA/CAN