--Creating Tables with SQL Snowflake--

create or replace TRANSIENT TABLE DS5111\_DB.LAB01\_KYD3ZJ.COURSES\_TABLE(

Course\_Name VARCHAR(16777216),

CourseMnemonic VARCHAR(16777216),

Course\_description VARCHAR(16777216),

Active Boolean

);

create or replace table DS5111\_DB.LAB01\_KYD3ZJ.TERMS\_TABLE(

CourseMnemonic VARCHAR(16777216),

Course\_Name VARCHAR(16777216),

Instructors\_Name VARCHAR(16777216),

Term VARCHAR(16777216)

);

create or replace table Instructors\_Table (

Instructors\_Name VARCHAR(16777216),

Status VARCHAR(16777216)

);

create or replace table LearningOutcome\_Table (

CourseMnemonic VARCHAR(16777216),

LO\_Description VARCHAR(16777216)

);

--SQL Question from Assignment--

--Question 1--

SELECT CourseMnemonic, Course\_Name

FROM COURSES\_TABLE

WHERE Active = true;

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--Question 2--

SELECT CourseMnemonic, Course\_Name

FROM COURSES\_TABLE

WHERE Active = false;

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--Question 3--

SELECT DISTINCT Instructors\_Name

FROM Instructors\_Table

WHERE Status != 'Employed';

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--Question 4--

SELECT c.CourseMnemonic, c.Course\_Name, COUNT(lo.CourseMnemonic) AS Num\_Learning\_Outcomes

FROM Courses\_Table c

LEFT JOIN LearningOutcome\_Table lo ON c.CourseMnemonic = lo.CourseMnemonic

GROUP BY c.CourseMnemonic, c.Course\_Name;

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--Question 5--

SELECT c.CourseMnemonic, c.Course\_Name

FROM Courses\_Table c

LEFT JOIN LearningOutcome\_Table lo ON c.CourseMnemonic = lo.CourseMnemonic

WHERE lo.CourseMnemonic IS NULL;

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--Question 6--

SELECT c.CourseMnemonic, c.Course\_Name, lo.LO\_Description

FROM Courses\_Table c

JOIN LearningOutcome\_Table lo ON c.CourseMnemonic = lo.CourseMnemonic

WHERE UPPER(lo.LO\_Description) LIKE '%SQL%';

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--Question 7--

SELECT DISTINCT it.Instructors\_Name

FROM Instructors\_Table it

JOIN TERMS\_TABLE tt ON it.Instructors\_Name = tt.Instructors\_Name

WHERE tt.Term = 'Summer2021' AND tt.CourseMnemonic = 'ds5100';

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--Question 8--

SELECT DISTINCT Instructors\_Name

FROM TERMS\_TABLE

WHERE Term = 'Fall2021'

ORDER BY Instructors\_Name;

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--Question 9--

SELECT Instructors\_Name, Term, COUNT(\*) AS Num\_Courses

FROM TERMS\_TABLE

GROUP BY Instructors\_Name, Term

ORDER BY Term, Instructors\_Name;

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--Question 10--

(I am not sure how to do this).

WITH InstructorCounts AS (

SELECT CourseMnemonic, Term, COUNT(DISTINCT Instructors\_Name) AS Num\_Instructors

FROM TERMS\_TABLE

GROUP BY CourseMnemonic, Term

)

SELECT CourseMnemonic, Term

FROM InstructorCounts

WHERE Num\_Instructors > 1;