

Assignment 2

Load data files and perform database analytics with advanced SQL features

1. Organizational data for a midsize company (1st dataset)

- Use **PSQL Tool** to run script *organizational_data.sql* with `\i` command to create table and insert data (5 pts)
- Write one query to show org structure with employee name indented by spaces based on level, show department, employee salary, and employee's department salary average and sum. Sort rows by id path to CEO. See table 1.b. below (30 pts)

2. Electric vehicles registered with Washington state (2nd dataset)

- Examine the columns & rows in file *Electric_Vehicle_Population_Data.csv* to write SQL to create table named **vehicle** to hold the data. Create the table (15 pts)
- Use **PSQL Tool** to load file into **vehicle** table with `\copy` command (15 pts)
- Write one query to pivot the data to display the count of electric vehicles by models and model years for all 5 Tesla models. The result should have models as columns, model years as rows, and the count of vehicles as values. Show 'All' top row with totals, and a 'Tesla' left column with totals. See table 2.c. below (35 pts)

- Provide a PDF document containing your SQL commands and results

1.b.

id	manager_id	name	title	dept	salary	dept_avg	dept_sum
1		James Smith	CEO	Executive	100000	100000	100000
2	1	Jessica Jones	VP of Engineering	Engineering	85000	72000	504000
4	2	Emily Davis	Engineering Manager 1	Engineering	75000	72000	504000
...							

2.c.

model_year	tesla	model_3	model_s	model_x	model_y	roadster
All						
2023						
2022						
...						