Part 1­

CUSTOMER:

Graphical user interface, table

Description automatically generated

RENTAL:

Graphical user interface, table

Description automatically generated

VEHICLE:

Graphical user interface, application, table, Excel

Description automatically generated

1. Display the total number of (how many) customers are in the database.

Graphical user interface, text, application

Description automatically generated

1. Display the number of vehicles of each make.

Graphical user interface, text, application

Description automatically generated

1. Display the number of rental tuples, the average cost of the rentals, and the largest and smallest cost of rental.

Graphical user interface, text, application

Description automatically generated

1. Display for each vehicle, the number of rentals (count) of that vehicle, the average cost of renting that vehicle, and the largest and smallest cost of renting that vehicle

Graphical user interface

Description automatically generated with medium confidence

1. Display for each vehicle, the number of rentals (count) of that vehicle, the average cost of renting that vehicle, and the largest and smallest cost of renting that vehicle for all vehicles that have been rented more than twice.

STACKOVERFLOW:

Select VEH\_ID, count(\*) AS Number\_of\_rentals, AVG(COST), MAX(COST), MIN(COST), Year(Date), Month(Date), DATEPART( wk, Date), Count(\*) As Days

From RENTAL

Where Date Between @StartDate And @EndDate

Group by VEH\_ID, Year(Date), Month(Date), DATEPART( wk, Date)

Having Count(\*) > 2

1. Display the customer id and customer name for all customers who have rented a vehicle. List each name only once.

Graphical user interface, text, application, email

Description automatically generated

1. Display the customer id, customer name, and vehicle id for all rentals. If the customer does not have a rental, the customer should still be shown. A NULL can be shown for vehicle id in this case.

Graphical user interface

Description automatically generated

1. Display the customer id, customer name, vehicle id, vehicle make, and vehicle model for all rentals.

Table

Description automatically generated

1. List the name of each customer. For each customer list the number of cars the customer has rented (it might be zero). If the customer has rented at least one car, list the number of times the customer has rented a car along with the average cost of all rentals and the maximum and minimum cost of a rental. If the customer has rented no cars, the number of times rented should be zero, and the cost items should all be null. The customer names should be in alphabetical order (note that the order will be by first name).

Table

Description automatically generated

1. List the customer name and date the rental was taken out for all rentals during the month of January, 2023. Order the results by the date the car was taken out. (You will need to do a bit of research about how the DATE data type works.)

Graphical user interface, text, application

Description automatically generated

Part 2

COURSE:

Graphical user interface, text

Description automatically generated

DEPARTMENT:

Graphical user interface, text, application

Description automatically generated

SECTION:

Graphical user interface, application, table

Description automatically generated

STUDENT:

Graphical user interface, table

Description automatically generated

TRANSCRIPT:

A screenshot of a computer

Description automatically generated with low confidence

FACULTY:

Graphical user interface, text, application

Description automatically generated

1. Display the total number of (how many) faculty in the English (ENGL) department.

Graphical user interface, application

Description automatically generated

1. Display the number of faculty in each department.

Graphical user interface, text, application

Description automatically generated

1. Display the average salary of the entire faculty, and the largest and smallest faculty salary.

Graphical user interface, text, application, Word

Description automatically generated

1. Display the number of faculty tuples, the average salary of the faculty, and the largest and smallest faculty salary in each department which has at least 15 faculty members.

Graphical user interface, text, application

Description automatically generated

1. Display the course number and course name of all courses in the English department.

Graphical user interface, application

Description automatically generated

1. Display the student id, student name, and advisor name for all students who have an advisor. (This will be a very large result list.)

Graphical user interface, text, application

Description automatically generated

1. Display the student id, student name, and advisor name for all students. If the student does not have an advisor, the student should still be shown. A NULL can be shown for advisor name.

Graphical user interface, text, application, email

Description automatically generated

1. List the name of each faculty and the name of the faculty’s chair for all faculty in the English department.

Graphical user interface, text, application

Description automatically generated

1. For the student with the name of John Nittany (assume there is only one student with this name), list the name of all courses the student has taken so far. Also list the grade the student has earned for the course.

Graphical user interface, text, application, Word

Description automatically generated

1. List the student id, student name, and advisor name of all students in the English department. All students in the department should be listed, even if they do not have an advisor. Order the results first by advisor name and then within advisor name, order by student id.

Graphical user interface, text, application, Word

Description automatically generated

Table

Description automatically generated with medium confidence