

## CIT 225 Lab3 Instructions

Lab 3 will give you extensive practice at writing queries (producing reports) from the truck database that you have built and populated. The queries will involve joins, aggregates, selective aggregation, built-in functions and formatting.

1. Run the lab2.sql script.
2. Produce a report to show the number of hauls by client sorted by client name ascending.

<u>Client</u>	<u>Haul Count</u>
Idaho Potatoes Inc	15
Oregon Lumber Inc	20
Washington Apples Inc	15

3. Produce a report to show the number of hauls by driver and truck. The driver will be the employee's first and last name together. Sort the report by driver and haul count descending.

<u>Driver</u>	<u>Truck</u>	<u>Haul Count</u>
Judy Shaw	Big Dog	5
Judy Shaw	Classy Cat	5
Judy Shaw	Mad Max	4
Matt Maloney	Mad Max	8
Matt Maloney	Classy Cat	8
Matt Maloney	Big Dog	5
Troy Taylor	Mad Max	8
Troy Taylor	Big Dog	4
Troy Taylor	Classy Cat	3

4. Produce a report that shows the same data as the last report but pivots the data to be two-dimensional. Sort the report by driver. (Do not use the Oracle Pivot clause, I want you to use selective aggregation.)

<u>Driver</u>	<u>Big Dog</u>	<u>Classy Cat</u>	<u>Mad Max</u>
Judy Shaw	5	5	4
Matt Maloney	5	8	8
Troy Taylor	4	3	8

5. Produce a report that shows the total mileage by each driver. This will be easier if you add extra rows to the mileage table so it is a bi-directional table.
- Write one insert statement that inserts six more rows into the mileage table making it bi-directional.
  - Write the report to show the total mileage by driver.

<u>Driver</u>	<u>Total Mileage</u>
Matt Maloney	14,196
Troy Taylor	10,491
Judy Shaw	10,471

6. Produce a report that shows the mileage by driver by month. This report should be a two-dimensional matrix of numbers. (Use selective aggregation.)

<u>Driver</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Total Mileage</u>
Troy Taylor	3,200	1,242	5,249	800	10,491
Matt Maloney	3,574	5,623	3,694	1,305	14,196
Judy Shaw	2,547	3,964	3,117	843	10,471

7. Starting from the report you wrote in step 6 produce another report that shows the mileage and gross revenue by driver by month. You will need to expand the from clause to include the vehicle, season and rate tables. (Use selective aggregation.)

Driver	Nov	Nov Gross Rev	Dec	Dec Gross Rev	Jan	Jan Gross
Rev	Feb	Feb Gross Rev	Total Mileage	Total Gross Rev		
MattMaloney	3,574	\$31,467.00	5,623	\$26,570.50	3,694	\$17,965.00
	14,196	\$82,527.50				
TroyTaylor	3,200	\$28,612.00	1,242	\$5,705.00	5,249	\$25,866.50
	10,491	\$64,583.50				
JudyShaw	2,547	\$22,333.50	3,964	\$18,283.00	3,117	\$15,985.00
	10,471	\$60,816.50				