Individual Project 4
DS160-02
Introduction to Data Science
Fall 2023

## Writing SQL Queries (50 points)

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**Goal:** This project aims to write several different SQL queries to extract data from a database.

**Instructions:** For this project, create an .sql script titled **IP4\_XXX.sql**, where **XXX** are your initials. Also create a GitHub repository titled **IP4\_XXX** to which you can push your code. Write and execute the following queries. **Add the snippet of the output in this document and submit it with the sql script**.

The dataset contains five tables: Customer, order line, orders, part, sales rep. Note down all of the primary keys

1. Print all rows and columns of the dataset

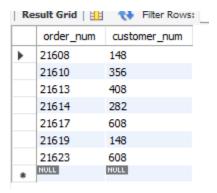
select \* from customer, order\_line, orders, part, sales\_rep;

customer_num	customer_name	street	city	state	zip	balance	credit_limit	sales_rep_num	order_num	part_num	num_o
725	Deerfield's Four Seasons	282 Col	Sheldon	FL	33553	248.00	7500.00	35	21610	DR93	1
725	Deerfield's Four Seasons	282 Col	Sheldon	FL	33553	248.00	7500.00	35	21610	DR93	1
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2. All rows, last name, first name, sales rep number, city from sales rep table select last\_name, first\_name, sales\_rep\_num, city from sales\_rep;

	last_name	first_name	sales_rep_num	city
•	Kaiser	Valerie	20	Grove
	Hull	Richard	35	Sheldon
	Perez	Juan	65	Fillmore
	NULL	NULL	NULL	NULL

Select order and customer number from orders select order\_num, customer\_num from orders;

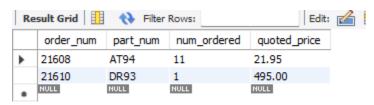


4. Select only two rows from order line

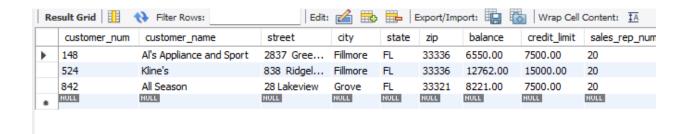
Select only two rows from order line

select \* from order\_line

## limit 2;



 Select all of the entries from customer where sales rep num=20 select \* from customer where sales\_rep\_num=20;

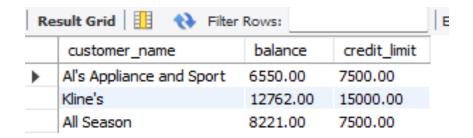


6. Select only customer name, balance, credit limit from customer where sales rep num=20

select customer\_name, balance, credit\_limit

from customer

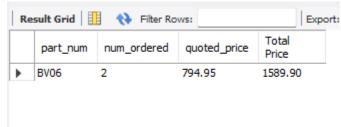
where sales rep\_num=20;



7. Select part num, num ordered, quoted price and total price where total price is (num\_ordered \* quoted\_price) where only 1 num ordered and the order number is 21617 select p.part\_num, o.num\_ordered, o.quoted\_price, (num\_ordered\*quoted\_price) as "Total Price" from order\_line o

from order\_line o join part p on p.part\_num=o.part\_num where order\_num=21617

limit 1;



8. Show all the orders from order date between '2010-10-20' and '2010-10-22'

select \* from orders where order date between '2010-10-20' and '2010-10-22';

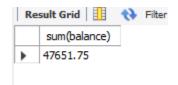
Re	Result Grid						
	order_num	order_date	customer_num				
•	21608	2010-10-2000:00:00	148				
	21610	2010-10-20 00:00:00	356				
	21613	2010-10-21 00:00:00	408				
	21614	2010-10-21 00:00:00	282				
	HULL	NULL	NULL				

9. List all of parts where the part description starts with 'D' and end with 'er' select \* from part where part\_description like 'D%er';



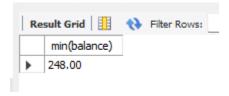
10. Show total balance from customer

select sum(balance) from customer;



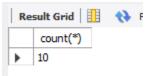
11. Show minimum balance from customer

select min(balance) from customer;



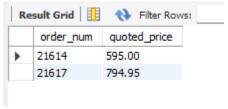
12. Count number of customers in customer table

select count (\*) from customer;



13. Select order number where the quote price is more than 500 but less than 1000

select order\_num, quoted\_price from order\_line where quoted\_price>500 and quoted\_price<1000;



14. Create a new table of customer name, last name, and first name from customer and sales rep table by matching up their primary key

select c.customer\_name, sr.last\_name, sr.first\_name from sales\_rep sr join customer c on sr.sales rep num=c.sales rep num;



**Project Submission:** Upload a link to your GitHub repository for the project in the area provided in Moodle by the deadline specified.