**Individual Project 4**

**DS160-02**

**Introduction to Data Science**

**Fall 2023**

**Writing SQL Queries (50 points)**

**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

|  |
| --- |
| customer |
| order\_line |
| orders |
| part |
| sales\_rep |

1. All rows, last name , first name, sales rep number, city from sales rep table

|  |  |  |  |
| --- | --- | --- | --- |
| Valerie | Kaiser | 20 | Grove |
| Richard | Hull | 35 | Sheldon |
| Juan | Perez | 65 | Fillmore |
|  |  |  |  |

1. Select order and customer number from orders

|  |  |
| --- | --- |
| 21608 | 148 |
| 21610 | 356 |
| 21613 | 408 |
| 21614 | 282 |
| 21617 | 608 |
| 21619 | 148 |
| 21623 | 608 |

1. Select only two rows from order line

|  |  |  |
| --- | --- | --- |
| 21608 | 2010-10-20 00:00:00 | 148 |
| 21610 | 2010-10-20 00:00:00 | 356 |
|  |  |  |

1. Select all of the entries from customer where sales rep num=20

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 148 | Al's Appliance and Sport | 2837 Greenway | Fillmore | FL | 33336 | 6550.00 | 7500.00 | 20 |
| 524 | Kline's | 838 Ridgeland | Fillmore | FL | 33336 | 12762.00 | 15000.00 | 20 |
| 842 | All Season | 28 Lakeview | Grove | FL | 33321 | 8221.00 | 7500.00 | 20 |
|  |  |  |  |  |  |  |  |  |

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

|  |  |  |
| --- | --- | --- |
| Al's Appliance and Sport | 6550.00 | 7500.00 |
| Kline's | 12762.00 | 15000.00 |
| All Season | 8221.00 | 7500.00 |

1. 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
2. Show all the orders from order date between '2010-10-20’ and '2010-10-22'

|  |  |  |
| --- | --- | --- |
| 21608 | 2010-10-20 00:00:00 | 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 |

1. List all of parts where the part description starts with ‘D’ and end with ‘er’

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| KL62 | Dryer | 12 | AP | 1 | 349.95 |
| KT03 | Dishwasher | 8 | AP | 3 | 595.00 |
|  |  |  |  |  |  |

1. Show total balance from customer

47651.75

1. Show minimum balance from customer

248.00

1. Count number of customers in customer table

10

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

|  |
| --- |
| 21614 |
| 21617 |

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

|  |  |  |
| --- | --- | --- |
| Al's Appliance and Sport | Valerie | Kaiser |
| Brookings Direct | Richard | Hull |
| Ferguson's | Juan | Perez |
| The Everything Shop | Richard | Hull |
| Bargains Galore | Juan | Perez |
| Kline's | Valerie | Kaiser |
| Johnson's Department Store | Juan | Perez |
| Lee's Sport and Appliance | Richard | Hull |
| Deerfield's Four Seasons | Richard | Hull |
| All Season | Valerie | Kaiser |

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