**Lab 1 – SQL I**

**Simple Queries with Solutions**

**Exercises**

Load your database with the Pine Valley Furniture Company data and run the following queries:

1. List all products in alphabetic order.

select distinct(productdescription) from product\_t order by 1 asc;

productdescription

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48 Bookcase

4-Drawer Dresser

6' Grandfather Clock

7' Grandfather Clock

8-Drawer Dresser

96 Bookcase

Amoire

Birch Coffee Tables

Cherry End Table

Entertainment Center

High Back Leather Chair

Nightstand

Oak Computer Desk

Pine End Table

Writer's Desk

(16 rows)

1. List all products ordered by PRICE in descending order, and products in ascending order.

select productdescription, productstandardprice from product\_t order by productstandardprice desc, productdescription asc;

productdescription | productstandardprice

-------------------------+----------------------

Entertainment Center | 1650.00

Amoire | 1200.00

7' Grandfather Clock | 1100.00

6' Grandfather Clock | 890.00

8-Drawer Dresser | 800.00

8-Drawer Dresser | 750.00

Oak Computer Desk | 750.00

4-Drawer Dresser | 500.00

High Back Leather Chair | 362.00

Writer's Desk | 325.00

Writer's Desk | 300.00

Pine End Table | 256.00

96 Bookcase | 225.00

96 Bookcase | 200.00

Birch Coffee Tables | 200.00

48 Bookcase | 175.00

Cherry End Table | 175.00

48 Bookcase | 150.00

Nightstand | 150.00

| 0.00

| 0.00

(21 rows)

1. How many work centers does Pine Valley have?

select count(\*) as number\_of\_work\_centers from workcenter\_t;

number\_of\_work\_centers

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3

(1 row)

1. Where are the work centers located?

select \* from workcenter\_t;

workcenterid | workcenterlocation

--------------+-------------------------

SM1 | Main Saw Mill

WR1 | Warehouse and Receiving

Tampa1 | Tampa Warehouse

(3 rows)

1. List the employees whose names begin with an R.

select employeeid, employeename from employee\_t where employeename like 'R%';

employeeid | employeename

------------+--------------

454-56-768 | Robert Lewis

(1 row)

1. Which employees were hired during 1999.

select employeeid, employeename from employee\_t where employeedatehired between '01-Jan-1999' and '31-Dec-1999';

employeeid | employeename

------------+----------------

123-44-345 | Phil Morris

332445667 | Lawrence Haley

(2 rows)

1. List the customers who live in California or Washington. Order them by zip code, from high to low.

select customerid, customername, customerstate from customer\_t where customerstate in('WA','CA') order by 3 desc;

customerid | customername | customerstate

------------+--------------+---------------

5 | Impressions | CA

(1 row)

1. Display the product line ID and the average standard price for all products in each product line.

select productlineid, avg(productstandardprice) from product\_t group by productlineid;

productlineid | avg

---------------+------------------------

1 | 581.2222222222222222

2 | 456.2500000000000000

3 | 222.4000000000000000

4 | 995.0000000000000000

5 | 0.00000000000000000000

(5 rows)

1. For each customer, list the CustomerID and total number of orders.

select customerid, count(\*) from order\_t group by customerid;

customerid | count

------------+-------

1 | 6

3 | 1

4 | 28

6 | 3

8 | 2

9 | 3

12 | 5

13 | 1

14 | 1

15 | 3

16 | 5

(11 rows)

1. For each customer, list the CustomerID and total number of orders placed in March 2010.

select customerid, count(\*) from order\_t where orderdate between '01-Mar-2010' and '30-Mar-2010' group by customerid;

customerid | count

------------+-------

1 | 3

4 | 22

6 | 1

8 | 2

9 | 3

12 | 4

13 | 1

14 | 1

15 | 3

16 | 5

(10 rows)

1. List territories and the number of their customers?

select territoryid, count(\*) from doesbusinessin\_t group by territoryid;

territoryid | count

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1 | 2

2 | 1

3 | 1

4 | 1

5 | 1

6 | 1

(6 rows)

1. For each salespersonid shows the number of orders.

select salespersonid, count(\*) from order\_t group by 1 having salespersonid is not null;

salespersonid | count

---------------+-------

2 | 7

3 | 23

4 | 3

5 | 5

6 | 7

8 | 1

9 | 2

(7 rows)