Homework 3

Name : Chakrya Ros

1. List the Product Lines in the **Product Lines** table. (7)

select productLine from productlines;

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| productLine |

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

| Classic Cars |

| Motorcycles |

| Planes |

| Ships |

| Trains |

| Trucks and Buses |

| Vintage Cars |

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

7 rows in set (0.00 sec)

2. List the EmployeeNumber, LastName, FirstName, Extension for all employees working out of the San Francisco office. (6)

select employeeNumber, lastName, firstName, Extension from employees where officeCode = 1;

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

| employeeNumber | lastName | firstName | Extension |

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

| 1002 | Murphy | Diane | x5800 |

| 1056 | Patterson | Mary | x4611 |

| 1076 | Firrelli | Jeff | x9273 |

| 1143 | Bow | Anthony | x5428 |

| 1165 | Jennings | Leslie | x3291 |

| 1166 | Thompson | Leslie | x4065 |

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

6 rows in set (0.00 sec)

3. List the ProductCode, ProductName, ProductVendor, QuantityInStock for all products in the “Vintage Cars” product line with a QuantityInStock between 1000 and 5000. (8)

select productcode,productname,productvendor,quantityinstock from products where productline='Vintage Cars' and QuantityInStock between 1000 and 5000;

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

| productcode | productname | productvendor | quantityinstock |

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

| S18\_1749 | 1917 Grand Touring Sedan | Welly Diecast Productions | 2724 |

| S18\_2949 | 1913 Ford Model T Speedster | Carousel DieCast Legends | 4189 |

| S18\_3140 | 1903 Ford Model A | Unimax Art Galleries | 3913 |

| S18\_3856 | 1941 Chevrolet Special Deluxe Cabriolet | Exoto Designs | 2378 |

| S24\_2022 | 1938 Cadillac V-16 Presidential Limousine | Classic Metal Creations | 2847 |

| S24\_3420 | 1937 Horch 930V Limousine | Autoart Studio Design | 2902 |

| S24\_3969 | 1936 Mercedes Benz 500k Roadster | Red Start Diecast | 2081 |

| S24\_4258 | 1936 Chrysler Airflow | Second Gear Diecast | 4710 |

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

8 rows in set (0.00 sec)

4. (Use a SUBQUERY) List the ProductCode, ProductName, ProductVendor, BuyPrice and MSRP for the least expensive (lowest MSRP) product sold by ClassicModels. (“MSRP” is the Manufacturer’s Suggested Retail Price.) (1)

select productcode,productname,productvendor,buyprice and msrp from products where MSRP = (select min(msrp) from products);

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

| productcode | productname | productvendor | buyprice and msrp |

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

| S24\_1937 | 1939 Chevrolet Deluxe Coupe | Motor City Art Classics | 1 |

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

1 row in set (0.01 sec)

5. What is the ProductName and Profit of the product that has the highest profit (profit = MSRP minus BuyPrice). (1)

select productName, max(MSRP -BuyPrice) as “Profit” from products;

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |

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

| productName | Profit |

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

| 1969 Harley Davidson Ultimate Chopper | 115.72 |

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

1 row in set (0.00 sec)

6. List the country and the number of customers from that country for all countries having between 4 and 12 customers. List the countries sorted in descending order from highest to lowest number of customers. Title the column heading for the count of customers as “Customers”. (6)

select country, count(customername) from customers group by country having count(customername) >= 4 and count(customername) <= 12;

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

| country | count(customername) |

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

| France | 12 |

| Australia | 5 |

| Spain | 7 |

| UK | 5 |

| Italy | 4 |

| New Zealand | 4 |

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

6 rows in set (0.01 sec)

7. List the ProductCode, ProductName, and number of orders for the product with the most orders. Title the column heading for the count of orders as “OrderCount”. (1)

8. List the EmployeeNumber, Firstname + Lastname (concatenated into one column in the answer set, separated by a blank and referred to as ‘name’) for all the employees reporting to Diane Murphy or Gerard Bondur. (8)

select employeeNumber, concat(firstName,' ',lastName) as name from employees where reportsTo = 1102;

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

| employeeNumber | name |

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

| 1337 | Loui Bondur |

| 1370 | Gerard Hernandez |

| 1401 | Pamela Castillo |

| 1501 | Larry Bott |

| 1504 | Barry Jones |

| 1702 | Martin Gerard |

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

6 rows in set (0.00 sec)

9. List the EmployeeNumber, LastName, FirstName of the president of the company (the one employee with no boss.) (1)

select employeeNumber, lastName, firstName from employees where jobTitle = "President";

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

| employeeNumber | lastName | firstName |

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

| 1002 | Murphy | Diane |

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

1 row in set (0.00 sec)

10. List the ProductName for all products in the “Vintage Cars” product line from the 1930’s. (12)

select productName from (select productName, substring(productName, 1, 4)as year from products where productLine = "Vintage Cars") as x where year >= '1930' and year < '1940';

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

| productName |

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

| 1937 Lincoln Berline |

| 1936 Mercedes-Benz 500K Special Roadster |

| 1932 Model A Ford J-Coupe |

| 1934 Ford V8 Coupe |

| 1932 Alfa Romeo 8C2300 Spider Sport |

| 1939 Cadillac Limousine |

| 1939 Chevrolet Deluxe Coupe |

| 1938 Cadillac V-16 Presidential Limousine |

| 1937 Horch 930V Limousine |

| 1936 Mercedes Benz 500k Roadster |

| 1936 Chrysler Airflow |

| 1930 Buick Marquette Phaeton |

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

12 rows in set (0.00 sec)

11. List the month name and the total number of orders for the month in 2003 in which ClassicModels customers placed the most orders. (1)

select monthname(orderdate) as 'Month', count(ordernumber) as 'Orders' from orders where year(orderdate)=2003 group by monthname(orderdate) order by count(ordernumber) desc limit 1;

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

| Month | Orders |

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

| November | 30 |

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

1 row in set (0.00 sec)

12. List the firstname, lastname of employees who are Sales Reps who have no assigned customers. (2)

select employees.firstname,employees.lastname from employees left join customers on employees.employeenumber=customers.salesrepemployeenumber where employees.jobtitle='Sales Rep' and customers.salesrepemployeenumber is null;

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

| firstname | lastname |

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

| Tom | King |

| Yoshimi | Kato |

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

2 rows in set (0.00 sec)

13. List the customername of customers with no orders who are not from Germany. (14)

select customers.customerName from customers where country != "Germany" and not exists (select \* from orders where customerNumber = customers.customerNumber);

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

| customerName |

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

| Havel & Zbyszek Co |

| American Souvenirs Inc |

| Porto Imports Co. |

| Asian Shopping Network, Co |

| ANG Resellers |

| BG&E Collectables |

| Schuyler Imports |

| Asian Treasures, Inc. |

| SAR Distributors, Co |

| Lisboa Souveniers, Inc |

| Precious Collectables |

| Anton Designs, Ltd. |

| Kremlin Collectables, Co. |

| Raanan Stores, Inc |

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

14 rows in set (0.00 sec)

14. List the customername and total quantity of products ordered for customers who have ordered fewer than 400 products across all their orders. (8)

select customerName, totalOrders from (select customerNumber, sum(quantityOrdered) as totalOrders from orderdetails join orders on orders.orderNumber = orderdetails.orderNumber group by customerNumber) as x join customers on customers.customerNumber = x.customerNumber where totalOrders < 400;

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

| customerName | totalOrders |

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

| Atelier graphique | 270 |

| Cambridge Collectables Co. | 357 |

| Auto-Moto Classics Inc. | 287 |

| Boards & Toys Co. | 102 |

| Royale Belge | 278 |

| Microscale Inc. | 381 |

| Frau da Collezione | 272 |

| Double Decker Gift Stores, Ltd | 357 |

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

8 rows in set (0.01 sec)

15. Create a NEW table named “TopCustomers” with three columns: CustomerNumber (integer), ContactDate (DATE) and OrderTotal (a decimal number with 9 digits in total having two decimal places). None of these columns can be NULL. Include a PRIMARY KEY constraint named “TopCustomer\_PK” on CustomerNumber. (no answer set)

create table TopCustomers(CustomerNumber int, ContactDate date, OrderTotal decimal(9), constraint TopCustomer\_PK primary key (CustomerNumber) );

16. Populate the new table “TopCustomers” with the CustomerNumber, today’s date, and the total value of all their orders (PriceEach \* quantityOrdered) for those customers whose order total value is greater than $140,000. (inserted 10 rows, no answer set)

insert into TopCustomers (customerNumber, ContactDate, OrderTotal) select customerNumber, now() as currentDate, totalValue from (select x.customerNumber, sum(x.totalValue) as totalValue from (select customerNumber, (orderdetails.priceEach \* orderdetails.quantityOrdered) as totalValue from orderdetails join orders on orders.orderNumber = orderdetails.orderNumber) as x group by x.customerNumber) as y where y.totalValue > 140000;

17. List the contents of the TopCustomers table in descending OrderTotal sequence. (10)

select customerNumber, ContactDate, OrderTotal from TopCustomers order by OrderTotal desc;

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

| customerNumber | ContactDate | OrderTotal |

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

| 141 | 2019-03-02 | 820690 |

| 124 | 2019-03-02 | 591827 |

| 114 | 2019-03-02 | 180585 |

| 151 | 2019-03-02 | 177914 |

| 119 | 2019-03-02 | 158573 |

| 148 | 2019-03-02 | 156251 |

| 323 | 2019-03-02 | 154622 |

| 131 | 2019-03-02 | 149085 |

| 187 | 2019-03-02 | 148410 |

| 450 | 2019-03-02 | 143536 |

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

10 rows in set (0.00 sec)

18. Add a new column to the TopCustomers table called OrderCount (integer). (No answer set)

alter table TopCustomers add OrderCount int;

19. Update the Top Customers table, setting the OrderCount column to a random number (from 0 to 18). (Should update 10 rows) HINT: use the RAND() and FLOOR() functions.

update TopCustomers set OrderCount = floor(rand() \* (18-0+1) + 0);

20. List the contents of the TopCustomers table in descending OrderCount sequence. (10)

select customerNumber, ContactDate, OrderTotal, OrderCount from TopCustomers order by OrderCount desc;

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

| customerNumber | ContactDate | OrderTotal | OrderCount |

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

| 450 | 2019-03-02 | 143536 | 17 |

| 151 | 2019-03-02 | 177914 | 15 |

| 124 | 2019-03-02 | 591827 | 14 |

| 141 | 2019-03-02 | 820690 | 13 |

| 114 | 2019-03-02 | 180585 | 8 |

| 119 | 2019-03-02 | 158573 | 4 |

| 131 | 2019-03-02 | 149085 | 4 |

| 187 | 2019-03-02 | 148410 | 1 |

| 148 | 2019-03-02 | 156251 | 0 |

| 323 | 2019-03-02 | 154622 | 0 |

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

21. Drop the TopCustomers table. (no answer set)

Drop table TopCustomers;