**-- 44. What product that makes us the most money (qty\*price) (1)**

SELECT productName

FROM Products NATURAL JOIN OrderDetails

GROUP BY productName

HAVING SUM(quantityOrdered\*priceEach) =

(

SELECT MAX(LIST\_OF\_PRODUCT\_TOTALS.productTotal)

FROM

(

SELECT productCode, sum(quantityOrdered\*priceEach) AS productTotal

FROM OrderDetails

GROUP BY productCode

) AS LIST\_OF\_PRODUCT\_TOTALS

);

|  |
| --- |
| PRODUCTNAME |
| 1992 Ferrari 360 Spider red |

**-- 45. List the product lines and vendors for product lines which are supported by < 5 vendors (3)**

SELECT productLine, productVendor

FROM Products

WHERE productLine = (SELECT productLine FROM Products

GROUP BY productLine

HAVING count(productVendor) < 5);

|  |  |
| --- | --- |
| PRODUCTLINE | PRODUCTVENDOR |
| Trains | Carousel DieCast Legends |
| Trains | Gearbox Collectibles |
| Trains | Classic Metal Creations |

**-- 46. List the products in the product line with the most number of products (38)**

SELECT productName, productLine

FROM Products

WHERE productLine =

(

SELECT productLine AS numOfProductsPerProductLine

FROM Products

GROUP BY productLine

HAVING count(productName) =

(

SELECT MAX(COUNTTABLE.numOfProductsPerProductLine) AS maxcount

FROM

(

SELECT productLine, count(productName) AS numOfProductsPerProductLine

FROM Products

GROUP BY productLine

) AS COUNTTABLE

)

);

|  |  |
| --- | --- |
| PRODUCTNAME | PRODUCTLINE |
| 1952 Alpine Renault 1300 | Classic Cars |
| 1972 Alfa Romeo GTA | Classic Cars |
| 1962 LanciaA Delta 16V | Classic Cars |
| 1968 Ford Mustang | Classic Cars |
| 2001 Ferrari Enzo | Classic Cars |
| 1969 Corvair Monza | Classic Cars |
| 1968 Dodge Charger | Classic Cars |
| 1969 Ford Falcon | Classic Cars |
| 1970 Plymouth Hemi Cuda | Classic Cars |
| 1969 Dodge Charger | Classic Cars |
| 1993 Mazda RX-7 | Classic Cars |
| 1965 Aston Martin DB5 | Classic Cars |
| 1948 Porsche 356-A Roadster | Classic Cars |
| 1995 Honda Civic | Classic Cars |
| 1998 Chrysler Plymouth Prowler | Classic Cars |
| 1999 Indy 500 Monte Carlo SS | Classic Cars |
| 1992 Ferrari 360 Spider red | Classic Cars |
| 1985 Toyota Supra | Classic Cars |
| 1969 Dodge Super Bee | Classic Cars |
| 1976 Ford Gran Torino | Classic Cars |
| 1948 Porsche Type 356 Roadster | Classic Cars |
| 1970 Triumph Spitfire | Classic Cars |
| 1957 Corvette Convertible | Classic Cars |
| 1957 Ford Thunderbird | Classic Cars |
| 1970 Chevy Chevelle SS 454 | Classic Cars |
| 1970 Dodge Coronet | Classic Cars |
| 1966 Shelby Cobra 427 S/C | Classic Cars |
| 1949 Jaguar XK 120 | Classic Cars |
| 1958 Chevy Corvette Limited Edition | Classic Cars |
| 1952 Citroen-15CV | Classic Cars |
| 1982 Lamborghini Diablo | Classic Cars |
| 1969 Chevrolet Camaro Z28 | Classic Cars |
| 1971 Alpine Renault 1600s | Classic Cars |
| 2002 Chevy Corvette | Classic Cars |
| 1956 Porsche 356A Coupe | Classic Cars |
| 1992 Porsche Cayenne Turbo Silver | Classic Cars |
| 1961 Chevrolet Impala | Classic Cars |
| 1982 Camaro Z28 | Classic Cars |

**47. Find the first name and last name of all customer contacts whose customer is located in the same state as the San Francisco office. Returns 11.**

SELECT CONTACTFIRSTNAME, CONTACTLASTNAME FROM Customers

WHERE STATE =

(SELECT STATE FROM Offices

WHERE CITY = 'San Francisco');

|  |  |
| --- | --- |
| CONTACTFIRSTNAME | CONTACTLASTNAME |
| Susan | Nelson |
| Julie | Murphy |
| Juri | Hashimoto |
| Julie | Young |
| Mary | Young |
| Valarie | Thompson |
| Julie | Brown |
| Brian | Chandler |
| Sue | Frick |
| Steve | Thompson |
| Sue | Taylor |

**48. What is the customer and salesperson of the highest priced order? The price of the order is the sum of the quantity ordered \* the price each for all the items within that order. Returns 1.**

|  |  |  |
| --- | --- | --- |
| CUSTOMERNAME | SALESPERSONFIRSTNAME | SALESPERSONLASTNAME |
| Dragon Souveniers, Ltd. | Mami | Nishi |

**49. What is the order number and the cost of the order for the most expensive orders? Note that there could be more than one order which all happen to add up to the same cost, and that same cost could be the highest cost among all orders. The cost of an order is the sum of the quantity ordered \* the price each for all the items within that order. Returns 1.**

SELECT Orders.ORDERNUMBER, SUM(QUANTITYORDERED \* PRICEEACH) AS COSTOFORDER FROM Orders

INNER JOIN OrderDetails ON Orders.ORDERNUMBER = OrderDetails.ORDERNUMBER

GROUP BY Orders.ORDERNUMBER

HAVING SUM(QUANTITYORDERED \* PRICEEACH) = (SELECT MAX(SUB1) FROM

(SELECT SUM(QUANTITYORDERED \* PRICEEACH) AS SUB1 FROM ORDERDETAILS

GROUP BY ORDERNUMBER) AS SUB2);

|  |  |
| --- | --- |
| ORDERNUMBER | COSTOFORDER |
| 10165 | 67392.85 |

**/\* 50) What is the name of the customer, the order number, and the total cost of the most**

**expensive orders? Returns 1\*/**

SELECT CUSTOMERNAME, ORDERS.ORDERNUMBER, SUM(QUANTITYORDERED\*PRICEEACH) AS TOTAL FROM CUSTOMERS

INNER JOIN ORDERS ON CUSTOMERS.CUSTOMERNUMBER=ORDERS.CUSTOMERNUMBER

INNER JOIN ORDERDETAILS ON ORDERS.ORDERNUMBER=ORDERDETAILS.ORDERNUMBER

GROUP BY CUSTOMERS.CUSTOMERNAME, ORDERS.ORDERNUMBER

HAVING SUM(QUANTITYORDERED\*PRICEEACH)= (SELECT MAX(SUM1) FROM

(SELECT SUM(QUANTITYORDERED \* PRICEEACH) AS SUM1 FROM ORDERDETAILS

GROUP BY ORDERNUMBER) AS SUM2);

|  |  |  |
| --- | --- | --- |
| CUSTOMERNAME | ORDERNUMBER | TOTAL |
| Dragon Souveniers, Ltd. | 10165 | 67392.85 |

**/\* 51) Take some portion of the above query and put that into a view. Then rewrite the above**

**query to use the view that you just created and consider how incorporating the view made**

**the query easier to understand. If you do not know how many rows this returns, please**

**come see me immediately.\*/**

CREATE VIEW MAXPRICE AS

SELECT CUSTOMERS.CUSTOMERNAME, ORDERS.ORDERNUMBER, SUM(QUANTITYORDERED\*PRICEEACH) AS TOTAL FROM CUSTOMERS

INNER JOIN ORDERS ON CUSTOMERS.CUSTOMERNUMBER=ORDERS.CUSTOMERNUMBER

INNER JOIN ORDERDETAILS ON ORDERS.ORDERNUMBER=ORDERDETAILS.ORDERNUMBER

GROUP BY CUSTOMERS.CUSTOMERNAME, ORDERS.ORDERNUMBER;

SELECT CUSTOMERNAME, ORDERNUMBER, TOTAL FROM MAXPRICE WHERE TOTAL =(SELECT MAX(TOTAL) FROM MAXPRICE);

|  |  |  |
| --- | --- | --- |
| CUSTOMERNAME | ORDERNUMBER | TOTAL |
| Dragon Souveniers, Ltd. | 10165 | 67392.85 |

**/\* 52) Show all of the customers who have ordered at least one product with the name “Ford” in**

**it, that “Dragon Souveniers, Ltd.” has also ordered. List them in reverse alphabetical order,**

**and do not consider the case of the letters in the customer name in the ordering. Show**

**each customer no more than once. Returns 61.\*/**

SELECT DISTINCT CUSTOMERS.CUSTOMERNAME FROM CUSTOMERS

INNER JOIN ORDERS ON CUSTOMERS.CUSTOMERNUMBER=ORDERS.CUSTOMERNUMBER

INNER JOIN ORDERDETAILS ON ORDERS.ORDERNUMBER=ORDERDETAILS.ORDERNUMBER

WHERE ORDERDETAILS.PRODUCTCODE IN

(SELECT ORDERDETAILS.PRODUCTCODE FROM PRODUCTS

INNER JOIN ORDERDETAILS ON PRODUCTS.PRODUCTCODE=ORDERDETAILS.PRODUCTCODE

INNER JOIN ORDERS ON ORDERDETAILS.ORDERNUMBER= ORDERS.ORDERNUMBER

INNER JOIN CUSTOMERS ON ORDERS.CUSTOMERNUMBER= CUSTOMERS.CUSTOMERNUMBER

WHERE PRODUCTS.PRODUCTNAME LIKE '%Ford%' AND CUSTOMERS.CUSTOMERNAME LIKE 'Dragon Souveniers, Ltd.')

ORDER BY LOWER(CUSTOMERS.CUSTOMERNAME) DESC;

|  |
| --- |
| CUSTOMERNAME |
| West Coast Collectables Co. |
| Volvo Model Replicas, Co |
| Tokyo Collectables, Ltd |
| The Sharp Gifts Warehouse |
| Technics Stores Inc. |
| Super Scale Inc. |
| Suominen Souveniers |
| Stylish Desk Decors, Co. |
| Souveniers And Things Co. |
| Scandinavian Gift Ideas |
| Saveley & Henriot, Co. |
| Salzburg Collectables |
| Rovelli Gifts |
| Reims Collectables |
| QuÃ©bec Home Shopping Network |
| Petit Auto |
| Oulu Toy Supplies, Inc. |
| Online Diecast Creations Co. |
| Muscle Machine Inc |
| Mini Wheels Co. |
| Mini Gifts Distributors Ltd. |
| Mini Creations Ltd. |
| Mini Auto Werke |
| Marta's Replicas Co. |
| Land of Toys Inc. |
| La Rochelle Gifts |
| La Corne D'abondance, Co. |
| L'ordine Souveniers |
| Kelly's Gift Shop |
| Iberia Gift Imports, Corp. |
| Heintze Collectables |
| Handji Gifts& Co |
| [GiftsForHim.com](http://giftsforhim.com) |
| [giftsbymail.co.uk](http://giftsbymail.co.uk) |
| [Gifts4AllAges.com](http://gifts4allages.com) |
| Gift Depot Inc. |
| [FunGiftIdeas.com](http://fungiftideas.com) |
| Euro+ Shopping Channel |
| Dragon Souveniers, Ltd. |
| Down Under Souveniers, Inc |
| Diecast Collectables |
| Diecast Classics Inc. |
| Danish Wholesale Imports |
| Corrida Auto Replicas, Ltd |
| Corporate Gift Ideas Co. |
| Collectables For Less Inc. |
| Clover Collections, Co. |
| Classic Legends Inc. |
| Classic Gift Ideas, Inc |
| Canadian Gift Exchange Network |
| Cambridge Collectables Co. |
| CAF Imports |
| Blauer See Auto, Co. |
| Baane Mini Imports |
| AV Stores, Co. |
| Auto AssociÃ©s & Cie. |
| Australian Gift Network, Co |
| Australian Collectors, Co. |
| Australian Collectables, Ltd |
| Anna's Decorations, Ltd |
| Amica Models & Co. |

**/\* 53) Which products have an MSRP within 5% of the average MSRP across all products? List**

**the Product Name, the MSRP, and the average MSRP ordered by the product MSRP. If**

**we denote the average MSRP as aMSRP, then the % difference between a particular**

**MSRP and aMSRP is 100 \* (MSRP - aMSRP)/aMSRP. Returns 14.\*/**

SELECT PRODUCTS.PRODUCTNAME, PRODUCTS.MSRP, AVG(MSRP) AS aMSRP

FROM PRODUCTS GROUP BY PRODUCTS.PRODUCTNAME, PRODUCTS.MSRP

HAVING msrp <= 1.05 \* (SELECT AVG(msrp) FROM Products)

AND msrp >= 0.95 \* (SELECT AVG(msrp) FROM Products);

|  |  |  |
| --- | --- | --- |
| PRODUCTNAME | MSRP | AMSRP |
| 18th Century Vintage Horse Carriage | 104.72 | 104.72 |
| 1913 Ford Model T Speedster | 101.31 | 101.31 |
| 1917 Maxwell Touring Car | 99.21 | 99.21 |
| 1936 Chrysler Airflow | 97.39 | 97.39 |
| 1937 Lincoln Berline | 102.74 | 102.74 |
| 1969 Harley Davidson Ultimate Chopper | 95.7 | 95.7 |
| 1974 Ducati 350 Mk3 Desmo | 102.05 | 102.05 |
| 1980â€™s GM Manhattan Express | 96.31 | 96.31 |
| 1982 Camaro Z28 | 101.15 | 101.15 |
| 1997 BMW F650 ST | 99.89 | 99.89 |
| America West Airlines B757-200 | 99.72 | 99.72 |
| Collectable Wooden Train | 100.84 | 100.84 |
| The Queen Mary | 99.31 | 99.31 |
| The Titanic | 100.17 | 100.17 |