Find products that were sold less than 2000$

select productname, SUM(quantity\*order\_details.unitprice) AS AmountBought

from products

join order\_details USING (productid)

group by productname

having sum (quantity \*order\_details.unitprice)

order by AmountBought ASC;

Find customers that bought more than 5000$ of products

SELECT companyname, SUM (quantity\*order\_details.unitprice)AS AmountBought

FROM customers

NATURAL JOIN orders

NATURAL JOIN order\_details

GROUP BY companyname

HAVING SUM (quantity\*order\_details.unitprice)>5000

ORDER BY AmountBought DESC

Find total sales group by product and category

SELECT categoryname, productname, SUM (od.unitprice\*quantity)

FROM categories

NATURAL JOIN products

NATURAL JOIN order\_details AS od

GROUP BY GROUPING SETS ((categoryname), (categoryname,productname))

ORDER BY categoryname,productname;

Find total sales by both customer’s company name as buyer and suppliers company name as supplier and order by buyer and supplier

SELECT c.companyname AS buyer,s.companyname AS supplier, SUM (od.unitprice\*quantity)

FROM customers AS c

NATURAL JOIN orders

NATURAL JOIN order\_details AS od

JOIN products USING (productid)

JOIN suppliers AS s USING (supplierid)

GROUP BY GROUPING SETS ((buyer), (buyer,supplier))

ORDER BY buyer, supplier;

Find total sales grouped by customer companyname and categoryname (must link to tables),order by companyname, categoryname with NULLS FIRST

SELECT companyname, categoryname, SUM (od.unitprice\*quantity)

FROM customers AS c

NATURAL JOIN orders

NATURAL JOIN order\_details AS od

JOIN products USING (productid)

JOIN categories AS s USING (categoryid)

GROUP BY GROUPING SETS ((companyname),(companyname, categoryname))

ORDER BY companyname, categoryname NULLS FIRST;

Do a rollup with customers, categories and products

SELECT c.companyname, categoryname, productname, SUM (od.unitprice\*quantity)

FROM customers AS c

NATURAL JOIN orders

NATURAL JOIN order\_details AS od

JOIN products USING (productid)

JOIN categories USING (categoryid)

GROUP BY ROLLUP (companyname,categoryname,productname)

ORDER BY companyname, categoryname, productname;

Do a rollup of suppliers, products, customers

SELECT s.companyname AS supplier, c.companyname AS buyer, productname, SUM (od.unitprice\*quantity)

FROM suppliers AS s

JOIN products USING (supplierid)

JOIN order\_details AS od USING (productid)

JOIN orders USING (orderid)

JOIN customers AS c USING (customerid)

GROUP BY ROLLUP (supplier, buyer, productname)

ORDER supplier, buyer,productname

Do a cube of total sales by customer, categories, and products

SELECT companyname, categoryname, productname, SUM (od.unitprice\*quantity)

FROM customers

NATURAL JOIN orders

NATURAL JOIN order\_details AS od

JOIN products USING (productid)

JOIN categories USING (categoryid)

GROUP BY CUBE (companyname, categoryname,productname)

Do a cube of total sales by suppliers, products and customers

SELECT s.companyname AS supplier, c.companyname as buyer, productname, SUM (od.unitprice\*quantity)

FROM suppliers AS s

JOIN products USING (supplierid)

JOIN order\_details AS od USING (productid)

JOIN orders USING (orderid)

JOIN customers AS c USING (customerid)

GROUP BY CUBE (supplier, buyer,productname)

GET a list of all customer and supplier company names

SELECT companyname

FROM customers

UNION

SELECT companyname

FROM suppliers

Distinct countries of all our customers and suppliers in alphabeical order

SELECT country

FROM customers

UNION

SELECT country

FROM suppliers

ORDER BY country ASC

All list of countries and suppliers and customers, with a record for each one

SELECT country

FROM customers

UNION ALL

SELECT country

FROM suppliers

ORDER BY country ASC

Find all countries that we have both customers and suppliers in

SELECT country

FROM customers

INTERSECT

SELECT country FROM suppliers

Find the number of customer and supplier pairs that are in the same country

SELECT COUNT (\*)FROM

(SELECT country FROM customers

INTERSECT ALL

SELECT country FROM suppliers) AS together

Distinct cities that we have a supplier and customer located in

SELECT city FROM customers

INTERSECT

SELECT city FROM suppliers

Find the count of the numaber of customers and suppliers pairs that are in the same city

(SELECT COUNT(\*)FROM

(SELECT city FROM customers

INTERSECT ALL

SELECT city FROM suppliers)AS same\_city

Find all countries that customers in but no suppliers

SELECT country FROM customers

EXCEPT

SELECT country FROM suppliers

Find the number of customers that are in a country without suppliers

SELECT COUNT (\*)FROM

(SELECT country FROM customers

EXCEPT ALL

SELECT country FROM suppliers)AS lonely\_customers

Cities we have a supplier with no customer

SELECT city FROM suppliers

EXCEPT

SELECT city FROM customers

How many customers do we have in cities without suppliers

SELECT COUNT (\*) FROM

(SELECT city FROM customers

EXCEPT

SELECT city FROM suppliers)as lonely\_customers

Find customers with an order in April, 1997

SELECT companyname

FROM customers

WHERE EXISTS (SELECT customerid FROM orders WHERE orders.customerid=customers.customerid AND

orderdate BETWEEN '1997-04-31' AND '1997-04-30')

What product didn't have an order in April 1997

SELECT productname

FROM products

WHERE NOT EXISTS (SELECT producid FROM order\_details

JOIN orders.customerid=customers.customerid

AND orderdate BETWEEN '1997-04-01'AND '1997-04-30' )