**customers products**

cust\_id (PK) prod\_id (PK)

cust\_name vend\_id (FK) [vendors]

cust\_address prod\_name

cust\_city prod\_price

cust\_state prod\_desc

cust\_state

cust\_zip **vendors**

cust\_country vend\_id (PK)

cust\_contact vend\_name

cust\_email vend\_address

vend\_city

**orderitems** vend\_state

order\_num (PK) (FK) [orders] vend\_zip

order\_item (PK) vend\_country

prod\_id (FK) [products]

quantity

item\_price

**orders**

order\_num (PK)

order\_date

cust\_id (FK) [customers] **Relations**

orderitems → orders: many to one

orderitems → products: one to one

orders → customers: many to one

products → vendors: many to one

**1. List all our customers by name.**

SELECT customers.cust\_name FROM customers;

**2. How many different, unique zip codes are our customers in?**

SELECT COUNT(DISTINCT customers.cust\_zip) AS num\_zips

FROM customers;

**3. What are the last 5 items on our product list?**

SELECT products.prod\_id, products.prod\_name

FROM products

ORDER BY products.prod\_id DESC

LIMIT 5;

**4. Show all the products that have been ordered in all orders, sorted by Product ID.**

SELECT products.prod\_id, products.prod\_name, orderitems.quantity, orderitems.order\_num FROM products, orderitems

WHERE products.prod\_id = orderitems.prod\_id

ORDER BY products.prod\_id ASC;

**5. Show all the products that have been ordered in all orders, sorted by Order # and then quantity.**

SELECT products.prod\_id, products.prod\_name, orderitems.quantity, orderitems.order\_num

FROM products, orderitems

WHERE products.prod\_id = orderitems.prod\_id

ORDER BY orderitems.order\_num ASC, orderitems.quantity ASC;

**6. Show all the products that have been ordered in all orders, from smallest quantity to largest.**

SELECT products.prod\_id, products.prod\_name, orderitems.quantity, orderitems.order\_num FROM orderitems, products

WHERE products.prod\_id = orderitems.prod\_id

ORDER BY orderitems.quantity ASC;

**7. Show all the products from orders where the quantity for a product is greater than 30.**

SELECT products.prod\_id, products.prod\_name, orderitems.quantity, orderitems.order\_num

FROM products, orderitems

WHERE products.prod\_id = orderitems.prod\_id AND orderitems.quantity > 30;

**8. Show all the items from orders where the quantity is greater than 30 and the unit price is** **greater than $3.**

SELECT products.prod\_id, products.prod\_name, orderitems.quantity, orderitems.item\_price, orderitems.order\_num

FROM products, orderitems

WHERE products.prod\_id = orderitems.prod\_id AND orderitems.quantity > 30

AND orderitems.item\_price > 3;

**9. Display all our products whose price is greater than $5.**

SELECT products.prod\_id, products.prod\_name, products.prod\_price

FROM products

WHERE products.prod\_price > 5;

**10. Show all the products we carry that are not from Bears R Us.**

SELECT products.prod\_id, products.prod\_name, vendors.vend\_name

FROM products, vendors

WHERE vendors.vend\_name != 'Bears R Us'

ORDER BY products.prod\_id ASC, vendors.vend\_name ASC;

**11. Show all the items from orders where the quantity is between 25 and 50 and the price is between $2 and $5.**

SELECT orderitems.prod\_id, products.prod\_name, orderitems.quantity, orderitems.item\_price, orderitems.order\_num

FROM orderitems, products

WHERE orderitems.prod\_id = products.prod\_id

AND orderitems.quantity BETWEEN 25 AND 50

AND orderitems.item\_price BETWEEN 2 AND 5;

**12. Show all the products we carry from Fun and Games and Jouets et ours.**

SELECT products.prod\_id, products.prod\_name, vendors.vend\_name, vendors.vend\_id

FROM products, vendors

WHERE products.vend\_id = vendors.vend\_id

AND vendors.vend\_name IN ('Fun and Games', 'Jouets et ours')

ORDER BY vendors.vend\_name ASC;

**13. Show all the products we carry from Bear Emporium and Bears R Us that cost less than $9.**

SELECT products.prod\_id, products.prod\_name, products.prod\_price, vendors.vend\_name

FROM products, vendors

WHERE products.vend\_id = vendors.vend\_id

AND vendors.vend\_name IN ('Bear Emporium', 'Bears R Us')

AND products.prod\_price < 9

ORDER BY vendors.vend\_name ASC;

**14. How many dolls do we carry?**

SELECT COUNT(\*) AS num\_dolls

FROM products

WHERE products.prod\_desc LIKE '%doll%';

**15. Show the total quantity of each of our products from each order and the total cost for each of those products, per order, displaying it in a column named “total\_sales.”**

SELECT orderitems.order\_num, orderitems.prod\_id, products.prod\_name, orderitems.quantity, orderitems.item\_price, orderitems.item\_price\*orderitems.quantity AS total\_sales

FROM orderitems, products

WHERE orderitems.prod\_id = products.prod\_id

ORDER BY orderitems.order\_num ASC, orderitems.prod\_id ASC;