115 Example SQL Queries

Consider this typical database:

customer (CID, cname, city, discount)
product (PID, pname, city, quantity, price)
agent (AID, aname, city, commission)
order (OID, date, CID, AID, PID, quantity, price)

1. Example: Find all customers (with their CIDs) from San Francisco.

2. List all cities where there is an agent.

3. Find all orders from New Orleans customers.

4. Get all combinations of agents and customers.

5. Give wholesale cost for all June orders in 1997.

6. Consider:

   SQL > select o.oid, (0.40 * (o.quantity * o.price))
   - (0.01 * (c.discount + a.commission)
   * (o.quantity * o.price)),
   from order o, customer c, agent a,
   where o.cid = c.cid and
   o.aid = a.aid;

What is the second column?
7. Select all pairs of customers based in the same city.

8. Find pid of products ordered by at least 2 customers.

9. Get cid’s of customers who order a product that was also ordered by agent 99.

10. Find cid of customers who have ordered from agents in L.A. or S.F.

11. Find all agents making the minimum commission.

12. Find cid of customers with discount less than any NY customers.

13. Give total amount of product 722 ordered
14. Find total number of customers.

15. Give cid of all customers with discount less than the max discount.

16. Find pid of products ordered by at least 2 customers.  
(Recall Query 8: re-do using a sub-select statement)

17. Give quantity of orders by product.

18. Give quantity of orders by product for products selling > 1000.

19. Give pid of all products purchased by at least 2 customers.

20. List cities where either a customer or an agent is based.
21. Give customers that have never placed an order with agent 99.

22. Find customers who have ordered every type of product.

NOTE: The “CONTAINS” keyword is not standard in SQL
Please don’t use it for homeworks or exams in IEOR 115.