CS165 SXY

SQL Problem Set

Compose the necessary SQL queries to produce the following reports.

1. Number of products per category. Output the category (name) and product count. Sort the list alphabetically by category.

2. List of discontinued products. Output the category (name), product (name) and the supplier (company name). Sort the list alphabetically by category. For each category, sort the list by product name.

3. Most expensive product per category. Output the category (name), product (name) and the unit price. Sort the list alphabetically by category.

4. List of all employees and who they report to. Output the employee's name (first name and lastname), and their manager's name (first name and last name). Sort the list alphabetically by employee last name, then by first name.

5. List of late shipments. Output the order ID, customer (company name), order amount, date required, shipped date, and the name of the employee that handled the order. Sort the list from most recent to least recent shipment.

6. No. of shipment (delivered orders) per country. Output the country and shipment count. Sort the list alphabetically by country.

7. Ranking of shipping companies by shipment made in 1996. Output the shipping company (name) and shipment count. Sort the list by shipment count, from highest to lowest.

8. List of products that have fallen below reorder level and have not yet been reordered. Output the product (name), supplier (company name), supplier's contact details (contact person and phone number), units in stock and reorder level. Sort the list from the most understocked product to the least understocked. (Get the difference between a product's stock count and reorder level to

determine how understocked it is.)

9. Biggest sale per employee. Output the employee's name (first name and last name), the order ID, customer (company name), sale (order amount), order date, and ship date. Sort the list by sale amount, from highest to lowest.

10. Ranking of employees by sales for the year 1997. Output the employee's name and total sales. Ranking is from highest to lowest sales amount.

11. Top ten orders by sales amount. Output the order ID, customer (company name), sale amount, order date and shipped date. (Hint: Using LIMIT n at the end of a query will restrict the number of returned rows to n, e.g. the query 'SELECT * FROM customers ORDER BY customerid LIMIT 10' will return the first 10 tuples in the customers relation.)

12. Summary of product sales from October 1, 1997 to September 30, 1998. Output the category (name), product (name) and sales amount. Sort the list by category. For each category, sort the products from highest to lowest sales.

13. Ranking of customers by orders (the total amount of all orders placed) for the year 1997. Output the customer ID, company name and total amount. Sort the list from highest to lowest amount.

14. Most recent order per customer. Output the customer (company name), order ID, order date and shipped date. Sort the list alphabetically by customer.

15. Total freight cost incurred per city and country for all shipment made in 1998.

Place your properly numbered solutions inside a plain text file, with the file name in the following format: CS165_SQLProbset_<lastname>_<firstname>.txt

Email your solutions file to annemirasol@gmail.com, with the subject as "CS165 SQL Problem Set - <lastname> <firstname>"