SQL Practice Questions on Subqueries

Q. 1

Sample table: Customer

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3008	Julian Green	London	300	5002
3004	Fabian Johnson	Paris	300	5006
3009	Geoff Cameron	Berlin	100	5003
3003	Jozy Altidor	Moscow	200	5007

Sample table: Orders

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001

Sample table: salesman

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5003	Lauson Hen	San Jose	0.12
5007	Paul Adam	Rome	0.13

i) From the following tables, write a SQL query to find all the orders issued by the salesman 'Paul Adam'. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

ii) From the following tables write a SQL query to find all orders generated by London-based salespeople. Return ord_no, purch_amt, ord_date, customer_id, salesman_id.

iii) From the following tables write a SQL query to find all orders generated by the salespeople who may work for customers whose id is 3007. Return ord_no, purch_amt, ord_date, customer_id, salesman_id.

iv) From the following tables write a SQL query to find the order values greater than the average order value of 10th October 2012. Return ord_no, purch_amt, ord_date, customer_id, salesman_id.

v) From the following tables, write a SQL query to find all the orders generated in New York city. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

vi) From the following tables write a SQL query to determine the commission of the salespeople in Paris. Return commission.

vii) Write a query to display all the customers whose ID is 2001 below the salesperson ID of Mc Lyon.

viii) From the following tables write a SQL query to count the number of customers with grades above the average in New York City. Return grade and count.

ix) From the following tables, write a SQL query to find those salespeople who earned the maximum commission. Return ord_no, purch_amt, ord_date, and salesman_id.

x) From the following tables write SQL query to find the customers who placed orders on 17th August 2012. Return ord_no, purch_amt, ord_date, customer_id, salesman_id and cust_name.

xi) From the following tables write a SQL query to find salespeople who had more than one customer. Return salesman_id and name.

xii) From the following tables write a SQL query to find those orders, which are higher than the average amount of the orders. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

xiii) From the following tables write a SQL query to find those orders that are equal or higher than the average amount of the orders. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

xiv) Write a query to find the sums of the amounts from the orders table, grouped by date, and eliminate all dates where the sum was not at least 1000.00 above the maximum order amount for that date.

xv) Write a query to extract all data from the customer table if and only if one or more of the customers in the customer table are located in London.

xvi) From the following tables write a SQL query to find salespeople who deal with multiple customers. Return salesman_id, name, city and commission.

xvii) From the following tables write a SQL query to find salespeople who deal with a single customer. Return salesman_id, name, city and commission.

xviii) From the following tables, write a SQL query to find the salespeople who deal the customers with more than one order. Return salesman_id, name, city and commission.

xix) From the following tables write a SQL query to find the salespeople who deal with those customers who live in the same city. Return salesman_id, name, city and commission.

xx) From the following tables write a SQL query to find salespeople whose place of residence matches any city where customers live. Return salesman_id, name, city and commission.

xxi) From the following tables write a SQL query to find all those salespeople whose names appear alphabetically lower than the customer's name. Return salesman_id, name, city, commission.

xxii) From the following table write a SQL query to find all those customers with a higher grade than all the customers alphabetically below the city of New York. Return customer_id, cust_name, city, grade, salesman_id.

xxiii) From the following table write a SQL query to find all those orders whose order amount exceeds at least one of the orders placed on September 10th 2012. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

xxiv) From the following tables write a SQL query to find orders where the order amount is less than the order amount of a customer residing in London City. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

xxv) From the following tables write a SQL query to find those orders where every order amount is less than the maximum order amount of a customer who lives in London City. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

xxvi) From the following tables write a SQL query to find those customers whose grades are higher than those living in New York City. Return customer_id, cust_name, city, grade and salesman_id.

xxvii) From the following tables write a SQL query to calculate the total order amount generated by a salesperson. Salespersons should be from the cities where the customers reside. Return salesperson name, city and total order amount.

xxviii) From the following tables write a SQL query to find those customers whose grades are not the same as those who live in London City. Return customer_id, cust_name, city, grade and salesman_id.

xxix) From the following tables write a SQL query to find those customers whose grades are different from those living in Paris. Return customer_id, cust_name, city, grade and salesman_id.

xxx) From the following tables write a SQL query to find all those customers who have different grades than any customer who lives in Dallas City. Return customer_id, cust_name,city, grade and salesman_id.

Q. 2

Sample table: company_mast

COM_ID	COM_NAME
11	Samsung
12	iBall
13	Epsion
14	Zebronics
15	Asus
16	Frontech

Sample table: item_mast

101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

a) From the following tables write a SQL query to calculate the average price of each manufacturer's product along with their name. Return Average Price and Company.
b) From the following tables write a SQL query to calculate the average price of each manufacturer's product of 350 or more. Return Average Price and Company.
c) From the following tables, write a SQL query to find the most expensive product of each company. Return Product Name, Price and Company.

Q. 3

Sample table: emp_department

DPT_CODE	DPT_NAME	DPT_ALLOTMENT
57	IT	65000
63	Finance	15000
47	HR	240000
27	RD	55000
89	QC	75000

Sample table: emp_details

EMP_IDNO	EMP_FNAME	EMP_LNAME	EMP_DEPT
127323	Michale	Robbin	57
526689	Carlos	Snares	63
843795	Enric	Dosio	57
328717	Jhon	Snares	63
444527	Joseph	Dosni	47
659831	Zanifer	Emily	47
847674	Kuleswar	Sitaraman	57
748681	Henrey	Gabriel	47
555935	Alex	Manuel	57

a) From the following tables write a SQL query to find employees whose last name is Gabriel or Dosio. Return emp_idno, emp_fname, emp_lname and emp_dept.
b) From the following tables, write a SQL query to find the employees who work in department 89 or 63. Return emp_idno, emp_fname, emp_lname and emp_dept.
c) From the following tables write a SQL query to find those employees who work for the department where the departmental allotment amount is more than Rs. 50000. Return emp_fname and emp_lname.
d) From the following tables write a SQL query to find the departments whose sanction amount is higher than the average sanction amount for all departments. Return dpt_code, dpt_name and dpt_allotment.
e) From the following tables write a SQL query to find the departments with the second lowest sanction amount. Return emp_fname and emp_lname.