

Eastern University, Sri Lanka
Second Examination in Science (2003/2004)
Second Semester (June/July, 2005)
CS 253-Database Design (Practical)



Time: 2 hours

SNo	SName	City	Comm	CNo	CName	City	Rating	ONo	Amt	ODate
1007	Rifkin	Barcelona	0.15	2008	Cisneros	San Jose	300	3001	18.69	10/3/05
1001	Peel	London	0.12	2001	Hoffman	London	100	3003	767.19	10/3/05
1004	Motika	London	0.11	2007	Pereira	Rome	100	3002	1900.00	10/3/05
1002	Serres	San Jose	0.13	2003	Liu	San Jose	200	3005	5160.45	10/3/05
1007	Rifkin	Barcelona	0.15	2008	Cisneros	San Jose	300	3006	1098.16	10/3/05
1003	Axelrod	New York	0.10	2002	Giovanni	Rome	200	3009	1713.23	10/4/05
1002	Serres	San Jose	0.13	2004	Grass	Berlin	300	3007	75.75	10/4/05
1001	Peel	London	0.12	2006	Clemens	London	100	3008	4723.0	10/5/05
1002	Serres	San Jose	0.13	2004	Grass	Berlin	300	3010	1309.95	10/6/05
1001	Peel	London	0.12	2006	Clemens	London	100	3011	9891.88	10/6/05

The table itself is intended to resemble a real-life business situation of salespeople, their customers and customer's orders. A particular salesperson may have more than one customer. Commission and personal details of a salesperson can be identified from salesperson's number. A customer can make many orders on a particular date.

Here is an explanation of the columns in above table.

- SNo – The number of a salesperson.
- SName – The name of the salesperson.
- City – The location of the salesperson.
- Comm- The salesperson's commission on orders in decimal form.
- CNum – The number of a customer.
- CNmae- The name of the customer.
- City- The location of the customer.
- Rating- A numeric code indicating level of preference given this customer. Higher numbers indicate greater preference .
- Ono- The number of a purchase.
- Amt- The amount of the purchase.
- Odate- The date of the purchase.

[to be continued....]

[continuation....]

Using SQL do the following queries.

- (i) Write a query that produces the salesperson details with the columns in the following order: City, SName, SNo.
- (ii) Write a query that will produce the SNo values of all salespeople with orders currently in the orders without any repeats.
- (iii) Get all customers who were either located in San Jose or had a rating below 200 or equal.
- (iv) Write a query on the customers whose output will exclude all customers with a rating less than 100, unless they are located in Rome.
- (v) Write a query that selects all customers whose names begin with letter 'c'.
- (vi) List the largest order taken by each salesperson.
- (vii) List the SNo, ODate of the maximum purchases over \$3000.00.
- (viii) Write a query that counts the number of different non null city values in the customers.
- (ix) Assume each salesperson has a 12% commission. Write a query that will produce the order number, the salesperson number, and the amount of the salesperson's commission of that order.
- (x) Write a query that totals the orders for each day and places the results in descending order.
- (xi) Find all orders by customers not located in the same cities as their salespeople.
- (xii) Write a query produces all pairs of orders by a given customer, names that customer, and eliminate duplicates.
- (xiii) Get all orders that are greater than the average for October 4th.
- (xiv) List the commissions of all salespeople serving customers in London.
- (xv) Write a query that produces the names and rating of all customers who have above average order.