

SQL Query Extra Practice

Use these as extra practice – either for your SQL #1 assignment, studying for the exams, or both!

Single Table Queries

For these use the mxsales database (remember to use your own id – for example, m100sales). It has a single table, called retail_sales_feb. The table has the following fields (columns):

Field name	Data type	Description
OrderID	integer	The unique ID of the order
Ord_Date	date	The date of the order
Order_No	integer	The internal order number for tracking purposes
Cust_No	integer	The customer number associated with the order
Customer	varchar	The customer name associated with the order
Sales_Rep	varchar	The last name of the sales representative for the customer
Product_No	varchar	The product number of the product in the order
Product	varchar	Short name of the product in the order
Department	varchar	The name of the department from where the order comes
Quantity	integer	The number sold of that product for the order
Price	decimal	The unit price of the product sold in the order
Total	decimal	The total price (Price * Quantity) for the order

It may also be helpful to run a query that retrieves all data in the table to see how it's structured (i.e., `SELECT * FROM mxsales.retail_sales_feb`).

1. How many customers bought a dartboard?
2. How many customers bought a treadmill?
3. How many customers bought something from the Computer department?
4. What were the names of customers who bought an Organizer?
5. What are the names of customers who had Dakic as a sales rep?
6. Which sales rep had the highest total sales (list them all to find out)?
7. Which sales rep sold the most laser printers (list them all to find out)?
8. How many total items were sold overall?
9. What is the least expensive product in the database?
10. What is the name of the customer who had Sheedy as a sales rep and bought a Color Scanner?
11. Which customers bought products more than \$300 and what were the names of those products?

Multi-table Queries (Joins)

For these use the moviedb database. Make sure you look at the Movie Rental Schema.

12. Which customer lives at the address "1531 Sal Drive?"
13. How many customers live in Canada?
14. Which country has the most customers (list them all to find out)?
15. What is the postal code of Cape Coral?
16. What is the largest single payment made by Emily Diaz? (use a subselect)
17. Which customers made the largest single payment in India? What was the amount? (use a subselect)

Answer Key for SQL Practice Problems

Remember, your schema name will look a little different (i.e., m100sales, m118sales, etc.). Use your own MySQL account.

Question	Query	Answer
1. How many customers bought a dartboard?	SELECT COUNT(*) FROM m0sales.retail_sales_feb WHERE product = 'Dartboard';	3
2. How many customers bought a treadmill?	SELECT COUNT(*) FROM m0sales.retail_sales_feb WHERE product = 'Treadmill';	7
3. How many customers bought something from the Computer department?	SELECT COUNT(DISTINCT customer) FROM m0sales.retail_sales_feb WHERE department = 'Computer';	8
4. What were the names of customers who bought an Organizer?	SELECT DISTINCT Customer FROM m0sales.retail_sales_feb WHERE product='Organizer';	Smith Ben Martin Dan Jones Mathew Rose Clair Lopez Maria
5. What are the names of customers who had Dakic as a sales rep?	SELECT DISTINCT Customer FROM m0sales.retail_sales_feb WHERE sales_rep='Dakic';	Sweet Mary Rose Clair Martin Dan Jovanovic Robert Smith Ben
6. Which sales rep had the highest total sales (list them all to find out)?	SELECT Sales_Rep,SUM(Total) FROM m0sales.retail_sales_feb GROUP BY Sales_Rep ORDER BY SUM(Total) DESC;	Jenkin 9158.00 Dakic 7874.70 Salt 6429.85 Parker 4241.98 Smith 3931.06 Sheedy 1952.50 Ibrahim 1469.37 Walsh 900.00
7. Which sales rep sold the most laser printers (list them all to find out)?	SELECT Sales_Rep,SUM(Quantity) FROM m0sales.retail_sales_feb WHERE Product='Laser Printer' GROUP BY Sales_Rep ORDER BY SUM(Quantity) DESC;	Dakic 14 Jenkin 9 Salt 3 Parker 2 Sheedy 1
8. How many total items were sold overall?	SELECT SUM(Quantity) FROM m0sales.retail_sales_feb;	321
9. What is the least expensive product in the database?	SELECT Product FROM m0sales.retail_sales_feb WHERE Price=(SELECT MIN(Price) FROM m0sales.retail_sales_feb);	Mouse Mat

10. What is the name of the customer who had Sheedy as a sales rep and bought a Color Scanner?	SELECT Customer FROM m0sales.retail_sales_feb WHERE Sales_Rep='Sheedy' AND Product='Color Scanner';	Smith Ben
11. Which customers bought products more than \$1000 and what were the names of those products?	SELECT Customer,Product FROM m0sales.retail_sales_feb WHERE Price > 1000;	Nelson Mary Walkman Dinh Tran Walkman Rose Clair Digital Camera
12. Which customer lives at the address "1531 Sal Drive?"	SELECT customer.first_name, customer.last_name FROM moviedb.customer, moviedb.address WHERE customer.address_id = address.address_id AND address='1531 Sal Drive';	DOROTHY TAYLOR
13. How many customers live in Canada?	SELECT COUNT(*) FROM moviedb.customer,moviedb.address, moviedb.city,moviedb.country WHERE customer.address_id = address.address_id AND address.city_id = city.city_id AND city.country_id = country.country_id AND country.country='Canada';	5
14. Which country has the most customers (list them all to find out)?	SELECT Country, COUNT(*) FROM moviedb.customer,moviedb.address, moviedb.city,moviedb.country WHERE customer.address_id = address.address_id AND address.city_id = city.city_id AND city.country_id = country.country_id GROUP BY Country ORDER BY COUNT(*) DESC;	India 60
15. What is the postal code of Cape Coral?	SELECT postal_code FROM moviedb.address,moviedb.city WHERE address.city_id = city.city_id AND city.city='Cape Coral';	31342
16. What is the largest single payment made by Emily Diaz? (use a subselect)	SELECT payment.amount FROM moviedb.payment,moviedb.rental,moviedb.customer WHERE payment.rental_id=rental.rental_id AND rental.customer_id=customer.customer_id AND customer.first_name='Emily' and customer.last_name='Diaz' AND payment.amount=(SELECT MAX(payment.amount) FROM moviedb.payment,moviedb.rental,moviedb.customer WHERE payment.rental_id=rental.rental_id AND rental.customer_id=customer.customer_id AND customer.first_name='Emily' and customer.last_name='Diaz');	8.99

<p>17. Which customers made the largest single payment in India? What was the amount? (use a subselect)</p>	<pre>SELECT payment.amount,customer.first_name,customer.last_name FROM moviedb.payment,moviedb.rental,moviedb.customer, moviedb.address, moviedb.city,moviedb.country WHERE payment.rental_id=rental.rental_id AND rental.customer_id=customer.customer_id AND customer.address_id=address.address_id AND address.city_id=city.city_id AND city.country_id=country.country_id AND country.country='India' AND payment.amount=(SELECT MAX(payment.amount) FROM moviedb.payment,moviedb.rental,moviedb.customer, moviedb.address, moviedb.city,moviedb.country WHERE payment.rental_id=rental.rental_id AND rental.customer_id=customer.customer_id AND customer.address_id=address.address_id AND address.city_id=city.city_id AND city.country_id=country.country_id AND country.country='India');</pre>	<p>10.99 ADAM GOOCH 10.99 SHERRI RHODES 10.99 ERIK GUILLEN 10.99 TIM CARY 10.99 LENA JENSEN 10.99 ANITA MORALES 10.99 JOHN FARNSWORTH 10.99 BRADLEY MOTLEY 10.99 BRADLEY MOTLEY 10.99 LORI WOOD 10.99 JOSHUA MARK 10.99 NANCY THOMAS</p>
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