Lab 2 Single-Table SELECT Questions & Outputs

Single-Table SELECT queries on MGS Schema

Enter and run your own SELECT statements

In these exercises, you'll enter and run your own SELECT statements.

1. Write a SELECT statement that returns four columns from the Products table: product_code, product_name, list_price, and discount_percent. Then, run this statement to make sure it works correctly.

   Add an ORDER BY clause to this statement that sorts the result set by list price in descending sequence. Then, run this statement again to make sure it works correctly. This is a good way to build and test a statement, one clause at a time.

   Output:

	PRODUCT_CODE	PRODUCT_NAME	LIST_PRICE	DISCOUNT_PERCENT
1	sg	Gibson SG	2517	52
2	les_paul	Gibson Les Paul	1199	30
3	tama	Tama 5-Piece Drum Set with Cymbals	799.99	15
4	precision	Fender Precision	799.99	30
5	ludwig	Ludwig 5-piece Drum Set with Cymbals	699.99	30
6	strat	Fender Stratocaster	699	30
7	hofner	Hofner Icon	499.99	25
8	fg700s	Yamaha FG700S	489.99	38
9	rodriguez	Rodriguez Caballero 11	415	39
10	washburn	Washburn D10S	299	0

2. Write a SELECT statement that returns one column from the Customers table named full_name that joins the last_name and first_name columns.

   Format this column with the last name, a comma, a space, and the first name like this:

   Doe, John

   Sort the result set by last name in ascending sequence.

   Return only the customers whose last name begins with letters from M to Z.

   Output:

	FULL_NAME
1	Sherwood, Allan
2	Valentino, Erin
3	Wilson, Frank Lee
4	Zimmer, Barry

3. Write a SELECT statement that returns these columns from the Products table:

   product_name The product_name column

list_price	The list_price column
date_added	The date_added column

Return only the rows with a list price that's greater than 500 and less than 2000.

Sort the result set in descending sequence by the date_added column.

Output:

	PRODUCT_NAME	LIST_PRICE	DATE_ADDED
1	Tama 5-Piece Drum Set with Cymbals	799.99	30-JUL-22
2	Ludwig 5-piece Drum Set with Cymbals	699.99	30-JUL-22
3	Fender Precision	799.99	01-JUN-22
4	Gibson Les Paul	1199	05-DEC-21
5	Fender Stratocaster	699	30-OCT-21

4. Write a SELECT statement that returns these column names and data from the Products table:

product_name	The product_name column
list_price	The list_price column
discount_percent	The discount_percent column
discount_amount	A column that's calculated from the previous two columns
discount_price	A column that's calculated from the previous three columns

Use the FETCH operator so the result set contains only the first 5 rows.

Sort the result set by discount price in descending sequence.

Output:

	PRODUCT_NAME	LIST_PRICE	DISCOUNT_PERCENT	DISCOUNT_AMOUNT	DISCOUNT_PRICE
1	Gibson SG	2517	52	1308.84	1208.16
2	Gibson Les Paul	1199	30	359.7	839.3
3	Tama 5-Piece Drum Set with Cymbals	799.99	15	119.9985	679.9915
4	Fender Precision	799.99	30	239.997	559.993
5	Ludwig 5-piece Drum Set with Cymbals	699.99	30	209.997	489.993

5. Write a SELECT statement that returns these column names and data from the Order_Items table:

item_id	The item_id column
item_price	The item_price column
discount_amount	The discount_amount column
quantity	The quantity column
price_total	A column that's calculated by multiplying the item price by the quantity
discount_total	A column that's calculated by multiplying the discount amount by the quantity
item_total	A column that's calculated by subtracting the discount amount from the item price and then multiplying by the quantity

Only return rows where the item_total is greater than 500.

Sort the result set by item total in descending sequence.

Output:

	ITEM_ID	ITEM_PRICE	DISCOUNT_AMOUNT	QUANTITY	PRICE_TOTAL	DISCOUNT_TOTAL	ITEM_TOTAL
1	5	1199	359.7	2	2398	719.4	1678.6
2	3	2517	1308.84	1	2517	1308.84	1208.16
3	1	1199	359.7	1	1199	359.7	839.3
4	11	799.99	120	1	799.99	120	679.99
5	9	799.99	240	1	799.99	240	559.99

Work with nulls and test expressions

6. Write a SELECT statement that returns these columns from the Orders table:

order_id	The order_id column
order_date	The order_date column
ship_date	The ship_date column

Return only the rows where the ship_date column contains a null value.

Output:

ORDER_ID	ORDER_DATE	SHIP_DATE
6	31-MAR-22	(null)
8	02-APR-22	(null)
9	03-APR-22	(null)

7. Write a SELECT statement that uses the SYSDATE function to create a row with these columns:

today_unformatted	The SYSDATE function unformatted
today_formatted	The SYSDATE function in this format: MM-DD-YYYY

This displays a number for the month, a number for the day, and a four-digit year.

Use a FROM clause that specifies the Dual table.

Output:

TODAY_UNFORMATTED	TODAY_FORMATTED
04-SEP-24	09/04/2024

8. Write a SELECT statement that creates a row with these columns:

price	100 (dollars)

tax_rate	.07 (7 percent)
tax_amount	The price multiplied by the tax
total	The price plus the tax

To calculate the fourth column, add the expressions you used for the first and third columns.

Use a FROM clause that specifies the Dual table.

Output:

PRICE	TAX_RATE	TAX_AMOUNT	TOTAL
100	0.07	7	107