

INST327 - Database Design and Modeling

Assignment 2 Questions

Be sure to complete both questions.

DO NOT USE THESE STRUCTURE:

- category_id = x, where x is a PK value from the category table.
- Hard coding calculated values such as sums and averages. Instead, use appropriate functions and a “dynamic calculation” approach to calculate these values.

Make sure to run the create_my_guitar_shop.sql script to create the my_guitar_shop database.

Q1.) (50 points) Write a SELECT statement that displays each category of products and the surrounding data for each category. Include a final row which gives the subtotals of each row (i.e. number purchases of all categories, discount of all categories, etc.). Replicate the result set below, including results, sort, column headers, and all formatting aspects:

	Product Category	Number Purchased	Total Discount \$	Total Price	Total Sales
►	Basses	1	\$255.00	\$849.99	\$594.99
	Drums	2	\$202.50	\$1,549.98	\$1,347.48
	Guitars	10	\$4,298.00	\$17,593.97	\$13,295.97
	Keyboards	NULL	NULL	NULL	NULL
	NULL	13	\$4,755.50	\$19,993.94	\$15,238.44

(5 rows returned)

Q2.) (50 points) Replicate the sample output below which provides basic information about the guitar shop's customers. For the destination, assume this is based on their shipping address. **You must accomplish this with either a subquery or CTE structure, it is your choice.**

(+2 points bonus): Provide a short explanation of why you used either option (+2 points bonus). Neither answer is more correct, we would just like you to explain your choice.

Your result set should look like this, including results, sort, column headers, and all formatting aspects:

Customer	Email	Destination	Number of Orders	Most Recent Order
Jeff Beck	jeff.beck@yahoo.com	Paramus, NJ	2	2022-03-29 09:44:58
Ritchie Blackmore	rblackmore@gmail.com	Omaha, NE	1	2022-03-28 11:23:20
Alice Coltrane	acoltrane@mac.com	Los Angeles, CA	0	NULL
Manolo Franco	mfranco@mac.com	Los Angeles, CA	0	NULL
Nikki Glaspie	nglaspie@mac.com	New York, NY	0	NULL
Bobbie Hall	bhall@mac.com	Los Angeles, CA	0	NULL
Jimi Hendrix	jimih@solarone.com	Beaverton, OR	1	2022-03-30 15:22:31
Peggy Jones	pjones@gmail.com	Fresno, CA	1	2022-03-31 18:37:22
Samantha Maloney	sammaloney@yahoo.com	New York, NY	1	2022-04-02 11:26:38
Nile Rodgers	ynrodgers@hotmail.com	San Francisco, CA	2	2022-04-03 12:22:31
Ringo Starr	rstarr@mac.com	New York, NY	0	NULL
Nancy Wilson	nancywilson@sbcglobal.net	Denver, CO	1	2022-04-01 23:11:12

(12 rows returned)