Bike rental shop - SQL Case study (story created)

Introduction:

In my hometown, the owner of a bike rental shop would like to gather data to help grow the business. He has hired me as an SQL developer to answer his business questions, such as: How many bikes does the shop own by category? What was the rental revenue for each month? The answers are hidden in the database, and it's my job to figure out how to extract them using SQL.

Problem Statements

1. Owner would like to know how many bikes the shop owns by category. Can you get this for him?

2. Owner needs a list of customer names with the total number of memberships purchased by each.

   For each customer, display the customer's name and the count of memberships purchased.

3. Owner is working on a special offer for the winter months. Can you help him prepare a list of new rental prices?

4. Owner is looking for counts of the rented bikes and of the available bikes in each category.

5. Owner is preparing a sales report. He needs to know the total revenue from rentals by month, the total by year, and the all-time across all the years.

   The resulting table looks something like this:

year	month	revenue
2022	11	200.00
2022	12	150.00
2022	null	350.00
2023	1	110.00

...		
2023	10	335.00
2023	null	1370.00
null	null	1720.00

6. Owner has asked you to get the total revenue from memberships for each combination of year, month, and membership type.

   Display the year, the month, the name of the membership type.

7. Next, owner would like data about memberships purchased in 2023, with subtotals and grand totals for all the different combinations of membership types and months.

   Display the total revenue from memberships purchased in 2023 for each combination of month and membership type.

8. Now it's time for the final task.

   Owner wants to segment customers based on the number of rentals and see the count of customers in each segment. Use your SQL skills to get this!

Note: Solutions to all these problems can be found in

"SolutionBike_Rental_Case_Study.txt" file. (Can be opened in textedit in (Mac) as well

as in notepad (windows)).