| **Activity** | |
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| **Launching the Activity**  In this lab, you will write SQL queries to retrieve information from databases using all the concepts you learned so far.  Scenario: You have been provided with a sales dataset stored in a SQL database. The dataset contains information about sales transactions, including order details, customer information, and product details. Your task is to analyse this dataset using SQL to gain insights into the sales performance.  Let’s get started!   * In MySQL Command Line Client, use the database called “sales\_db” that you created in the previous lab. Refer to the three tables: Orders, Customers, and Products. * Please create the following six files and write SQL queries for each associated task: 1.sql, 2.sql, 3.sql, 4.sql, 5.sql, 6.sql. * Feel free to search for MySQL resources online to help you complete the assessment.   Good luck! | |
| **SQL Tasks**  **Task 1.** Retrieve all orders for products that cost more than $25, displaying the OrderID, ProductID, Quantity, and Total.  Expected Output:    **Task 2.** List each customer and the total quantity of products they ordered, sorted by the highest total quantity.  Expected Output:    **Task 3.** Display each product’s name, and its total sales, and classify it as "High Revenue" if total sales exceed $300, otherwise "Low Revenue".  Expected Output:    **Task 4.** Find customers who placed at least two orders in December 2023, with each order totaling over $100. Display their names and the count of such qualifying orders.  Expected Output:    **Task 5.** List each order with the first three characters of the customer name, the product name, and the total order amount.  Expected Output:    **Task 6.** Group the orders by product name, convert the product names to lowercase, and show the total quantity ordered for each product, sorted by product name.  Expected Output: | |
| **Code Evaluation**  **Please follow the instructions on Canvas to submit your code for instructor evaluation.**  Before submitting, check your lab results with the *test.py* file.  Steps:   1. Download the file shared with you and copy it to your project folder containing the 6 .sql files 2. Open the file in VS Code. Edit the code between Line 8-13 as per your configuration. 3. Click "File", then "Open Folder" to open the folder for your lab 4. Click "Terminal", then "Open Terminal" to open the integrated terminal 5. Install pytest with the command: python -m pip install pytest 6. Test your lab with the command: python -m pytest test.py 7. Wait for the marking script to finish executing 8. Read the terminal output to see your results | |