

Assessment item 3 - Query and update databases using SQL

Value: 16%

Due Date: 28-Sep-2025

Return Date: 21-Oct-2025

Group Assessment: No

Submission method options: Brightspace Assignment

7-Day Automatic Extension availability: Yes

Hurdle Assessment: No

TASK

Assignment 3: SQL Queries for the Retail/Inventory Database

Overview

In this assignment, you will write and execute SQL queries using the assignment3 database, which models a retail/inventory system. The database contains six tables: customer, emp, invoice, line, product, and vendor. Your task is to write queries based on specific requirements and provide evidence of successful execution through screenshots.

Instructions

Please complete the following tasks by writing and executing SQL queries on the assignment3 database. Ensure each query is correct and returns the expected results. For each task:

- Include the SQL query in your submission.
- Capture a screenshot of the query result from your MySQL interface.
- Place each screenshot immediately after the corresponding query in your submission.

Tasks

1. Retrieve the details of all female employees (based on title) who were hired after January 1, 1990.
2. Retrieve the details of vendors located in Georgia whose order flag is 'N'.

3. Retrieve the details of employees who are managers (i.e., employees with subordinates) and who were born before January 1, 1970.
4. Retrieve the details of products whose description contains the string 'saw' and whose vendor code is 21344.
5. Determine how many units were purchased by the customer with the last name Smith (CUS_LNAME = 'Smith'). Display the customer's full name and the total number of units purchased.
6. List the names of customers and the number of invoices they have generated, considering only customers who have a non-zero balance and at least one invoice.
7. Determine the total number of units sold for the product with product code '23109-HB'.
8. Perform the following operations on the product table (complete in three steps using three separate SQL commands):
 - Add a new column named Rating of type VARCHAR(6) that accepts values 'High' or 'Low'.
 - Update the Rating column to 'Low' for all products where the quantity on hand (P_QOH) is less than 10.
 - Display the details of all products, including the new Rating column.

Submission Guidelines

1. Compile your answers in a single submission file (e.g., PDF).
2. For each task:
 - Include the SQL query.
 - Insert the screenshot of the executed query and its result immediately below the query.
3. Ensure that screenshots are clear, displaying both the query and its output from the MySQL environment.
4. Additionally, submit your SQL script file (.sql) containing all queries for reference.

GENERATIVE AI

Use of Generative AI NOT permitted.

RATIONALE

This assessment task will assess the following learning outcome/s:

- be able to use complex Structured Query Language (SQL) commands to query a database.

MARKING CRITERIA AND STANDARDS

Each task is worth 2 marks. The marking criteria for this assignment is:

Criteria	HD	DI	CR	PS
be able to implement a database design using Structured Query Language (SQL). be able to query a database using SQL.	SQL syntax returns all attributes that meet the business requirement from the tables that hold the data and applies the correct restrictions to retrieve the required information.	SQL syntax returns all attributes that meet the business requirement from the tables that hold the data with minor omissions and applies appropriate restrictions to retrieve the required information.	SQL syntax returns key attributes that meet the business requirement from the tables that hold the data and applies relevant restrictions to retrieve the required information.	SQL syntax returns key attributes that meet the business requirement from the tables that hold the data but the restrictions applied to retrieve the required information contain minor errors.

REQUIREMENTS

Either submit your assignment as a PDF or a

Word document. Don't use any other file

formats.

Please include your student ID, name and subject code in your submission.