CSCI UA.0060 Spring 2024

Assignment 6 – SQL Queries

Deliverables

Upload the following file to your GitHub repository for this assignment.

A single Word file, containing all your answers.

Filename should be FirstInitialLastName-Ass6.docx. For example, John Smith’s deliverable would be JSmith-Ass6.docx

Overall Requirements

In this assignment, you will develop SQL queries to respond to the questions listed below concerning the United Helpers activities. In order to ensure that there are clear, “correct” answers, you will use a standard database, not the one you created in the last assignment. The queries that you develop, and the data returned must be copied into a Word document, which you should upload to your GitHub repository.

Specific Requirements

1. The first thing that you must do is to import the database that has been provided:
   1. Download the united\_helpers.sql file from GitHub to your computer.
   2. In MySQL Workbench, select File/Open SQL Script.
   3. Either drop the united\_helpers database or, if you want to keep it, edit lines 22-24 of the script to change the name of the database.
   4. Run the whole script (by clicking on the left lightning bolt)
   5. You should now have a database fully populated with data.
2. For each of the queries, unless specifically noted otherwise, you should only be retrieving one attribute (there might be zero, one or many rows). To emphasize this point, the only thing that the query should return is the answer to the question. For example, the answer to the question “How much does a bottle of morphine cost?” should be one number. It should not include other columns like the itemDescription. Just the answer to the question.
3. Queries should be formatted across multiple lines to ease readability. The simplest way to do this is to have a new line each time there is a SELECT, FROM, JOIN or WHERE.
4. Your queries should only return the answer to the question once. If a query returns the same value multiple times, it can be resolved by using the DISTINCT keyword.
5. You should not use sub-queries for any of these questions.
6. Your queries cannot be based upon other queries that you do ahead of time to find out specific ids or other fields. In other words, the queries must be based solely on the information in the questions.
7. The text of the queries should be copied into the Word document and the answers either entered in manually or copied. It is not OK to provide screenshots. Doing so will result in zero credit even if the answer is correct.
8. The Word document should be organized as follows:

x) What is the name of the item whose itemId is 1?

Query:

SELECT itemDescription

FROM item

WHERE itemId = 1;

Answer: Spam

Assignment Questions

1. How many containers of antibiotics are currently available?
2. Which volunteer(s), if any, have phone numbers that do not start with the number 2 and whose last name is not Jones. Query should retrieve names rather than ids.
3. Which volunteer(s) are working on transporting tasks? Query should retrieve names rather than ids.
4. Which task(s) have yet to be assigned to any volunteers (provide task descriptions, not the codes?
5. Which type(s) of package contain some kind of bottle?
6. Which items, if any, are not in any packages? Answer should be item descriptions.
7. Which task(s) are assigned to volunteer(s) that live in New Jersey (NJ)? Answer should have the task description and not the task ids.
8. Which volunteers began their assignments in the first half of 2021? Answer should have the volunteer names and not their ids.
9. Which volunteers have been assigned to tasks that include packing spam? Answer should have the volunteer names and not their ids.
10. Which item(s) (if any) have a total value of exactly $100 in one package? Answer should be item descriptions.
11. How many volunteers are assigned to tasks with each different status? The answer should show each different status and the number of volunteers sorted from highest to lowest)
12. Which task creates the heaviest set of packages and what is the weight? Show both the taskCode and the weight (You should be able to do this without using any sub-queries).
13. How many tasks are there that do not have a type of “packing”?
14. Of those items that have been packed, which item (or items) were touched by fewer than 3 volunteers? Answer should be item descriptions.
15. Which packages have a total value of more than 100? Show the packageIds and their value sorted from lowest to highest.

Grading Rubric

See Brightspace for Grading Rubric