BCS260 – Database – Fall 2017

Professor Kowalski Exam 2 SQL

This take-home test consists of 30 questions. The test is being distributed on October 19, 2017, and is **due back no later than November 21, 2017 (EOD) via Course Messages on Blackboard Learn**. **EXAMS RETURNED AFTER NOVEMBER 21, 2017, WILL NOT BE GRADED (THAT IS, WILL RECEIVE A ZERO GRADE)!** This test is open book, open notes, but is to be your own work only.

To do this test, you must use create the Henry Books database in SQL Server. I have provided the scripts to create the tables and insert the rows in two separate files, which are in the folder "SQL Takehome Exam – Exam 2 -- Due 11-21-2017 (EOD)".

I have also provided a copy of the database in Access 2013 format in the folder above as an aid– it is Henry_Books.accdb. **NOTE:** Access DB is only a guide. All SQL statements **MUST** be in SQL Server syntax!

Additionally, I have in the folder a database diagram of the database as created in SQL Server in that folder. Finally, I have two versions of this exam – one in Word format and one in PDF format. You will write the SQL Queries in SQL Server that answer each of the questions. When you are satisfied the query is the correct answer, copy and paste the SQL query from SQL Server into the Word document following the question. **Submit the query ONLY, not the results of the query.** I can run the query to test it independently. **Return ONLY the completed Word file on or before the due date.** Good luck!

ENTER YOUR NAME HERE: _____

1. List the book code and book title for every book.

2. List the complete contents of the BOOK table so that the output is in order of book type.

3. List the name of every publisher in located in New York City.

4. List the name of every publisher not located in New York City.

5. List the title of every book that is a science fiction book in paperback.

6. List the code and title of every book whose type is HOR or whose publisher code is PB.

7. Write a query to display the number of book titles associated with either publisher code ST or VB.

8. List the book code, book title and price for each book with a price greater than $10 but less than $20. NOTE: List ONLY one row for each book code, title

9. Henry's is contemplating running a 15% off sale on all of its books. To determine what the discounted prices would be, list the book code, title and discounted price of every book. NOTE: Label the discounted price column appropriately and list ONLY one row for each book code, title and discounted price.

10. Find the name of every publisher that contains "and" (whole word or part of a word) in the company name.

11. List the book code and title of every book whose type is FIC, MYS, or ART. Use the IN operator in the SQL command. List books in alphabetical order by title. Output by title first, then by book code.

12. How many book copies are available that are priced between $20 and $25, inclusive?

13. List the various types of books carried by Henry Books. Show only one entry for each book type.

14. Calculate the highest and lowest price for each type of book. Be sure to label the column heads for the output appropriately.

15. Repeat question 14, but only consider paperback books.

16. What is the command to determine the name of the most expensive book? If your query results in more than one of the same row, make sure the query is modified to return only one of the same row.

17. For every book, list the book code, book title, publisher code, and publisher name.

18. List the book title for every book type ART that is published by Random House.

19. List the book title for every book title that is published by Penguin USA.

20. Write a query to display the book title, quality of the book, and price of the book for books priced over $25. If you get duplicate rows, modify your query so it only displays unique rows.

21. Write a query to display the branch number, number of copies of each quality (condition), the condition, and the price for the book entitled "The Stranger."

22. Find out how many books are of book type MYS in all of the Henry branches. Be sure the column(s) are labeled appropriately.

23. Henry is considering increasing the price of his books in "Excellent" condition by 10%. Prepare a query that will show him the book code, book title, the current price and the price increased by 10%. Avoid displaying duplicate rows.

24. Write the SQL query that will display the title, publisher code, book type, first name, and last name of the author. Order the output by book title. Be sure to display only one entry per book title.

25. Write a query that will display the book title, author first name and author last name for all books in the “Henry’s on the Hill” branch that are in “Excellent” condition. Be sure to list only one entry per book title.

26. Write the SQL query you would run to delete entries with poor-quality books from the COPY table. [NOTE: Do NOT actually run the query in your database!]

27. What SQL query would you run to remove all of the data from the BOOK table but keep the table structure? [NOTE: Do NOT actually run the query in your database!]

28. Write the SQL statement that will create a new table that is a copy of the table BOOK (table structure with the same data) that will be called BOOK2?

29. Write the SQL statement that will add a new column to BOOK2 called ISBN for ISBN numbers. Henry's wants entries for this new column but will not require them.

30. Henry's Books has been bought out by an international conglomerate of book publishers that wants to replace the tables and their relationships in the Henry Books system with an entirely new set of tables, relationships and queries. Write the SQL script that will remove all of the tables from the Henry Books database in the correct order.