Write queries to address the following business needs.

1. I want to know how many employees with each title were born after 1965.

select title as "TITLE", count(title) as "EMPLOYEE COUNT" from employees e, titles t where e.emp\_no = t.emp\_no and birth\_date > 1965-01-01 group by title;

2. I want to know the average salary per title.

Select title as "TITLE", avg(salary) as "AVERAGE SALARY"

from titles t inner join salaries s on t.emp\_no = s.emp\_no group by title;

3. How much money was spent on salary for the marketing department between the years 1990 and 1992?

select departments.dept\_name, sum(salaries.salary) from departments

join dept\_emp on dept\_emp.dept\_no = departments.dept\_no

join salaries on salaries.emp\_no = dept\_emp.emp\_no

where departments.dept\_name = "Marketing"

and salaries.from\_date >= "1990-01-01"

and salaries.to\_date <= "1992-12-31";

Research

Look up 10 different SQL functions supported by MySQL that were not discussed in the video curriculum. Explain what they do and how they are used. Write a query using each of the 10 functions. (10 queries, one for each function).

1. GREATEST: Returns the greatest value in a list of expressions

SELECT GREATEST(15, 25, 17, 22, 71);

Would return 71 because it’s the greatest value in the list

1. TRUNCATE: returns a number truncated to a certain number of decimal places

SELECT TRUNCATE(1356.789, 2);

Would return 1356.78 because I indicated I wanted the number truncated to 2 decimal places.

1. NOW: returns the current date and time

SELECT NOW();

Returns the current date and time in the standard SQL format. Example: 2018-08-15 04:10:36

1. RTRIM: removes trailing spaces from a string

SELECT RTRIM(“Info with trailing spaces “);

Returns “Info with trailing spaces”. Can also be used with an alias to return something specific.

1. CURRENT\_USER: returns the username and host name for the MySQL account used by the server to authenticate the current client

SELECT CURRENT\_USER():

Returns the current username.

1. CHAR\_LENGTH: returns the length of the specified string

SELECT CHAR\_LENGTH(“String passed in”);

Returns the number of characters in a string. Can also be used with an alias to title the info returned.

1. CONCAT\_WS: returns a specified string or series of values separated by the character indicated

SELECT CONCAT\_WS(“ “, “words”, “that”, “will”, “be”, “separated”);

Returns “words that will be separated”

1. LCASE: converts a string to lowercase

SELECT LCASE(“ALL CAPS”);

Returns “all caps”

1. TIME: extracts the time value from a time expression

SELECT TIME(“19:30:10”);

Returns 19:30:10

1. REPLACE: replaces all occurrence of the string passed in

SELECT REPLACE(“TEST info”, “TEST”, “FUN”);

Will return “FUN info”