Relational Databases with MySQL Week 8 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: Using a text editor of your choice, write the queries that accomplishes the objectives listed below. Take screenshots of the queries and results and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document to the repository. Additionally, push an .sql file with all your queries to the same repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

Write queries to address the following business needs.

1. I want to know how many employees with each title were born after 1965-01-01.

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

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

Screenshots of Queries:

Question 1:

```
mysql> SELECT t.title, COUNT(*) AS "Number of Employees" FROM titles AS t INNER JOIN employees AS e ON
    -> e.emp_no = t.emp_no WHERE  e.birth_date > '1965-01-01'
    -> GROUP BY t.title;
```

Question 2:

```
mysql> SELECT t.title, avg(salary) FROM titles AS t
    -> INNER JOIN employees AS e ON e.emp_no = t.emp_no
    -> INNER JOIN salaries s on s.emp_no = t.emp_no
    -> GROUP BY t.title;
```

Question 3:

```
mysql> SELECT sum(s.salary), d.dept_name FROM salaries s
    -> INNER JOIN dept_emp de ON de.emp_no = s.emp_no
    -> INNER JOIN departments d ON d.dept_no = de.dept_no
    -> WHERE dept_name = "Marketing" AND de.from_date >= '1990-01-01' AND de.to_date <= '1992-12-31';
```

Screenshots of Query Results (only include the last 20 rows):

Question 1:

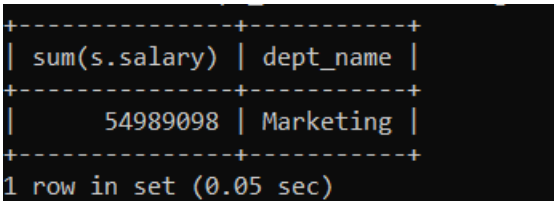
```
    -> GROUP BY t.title;
+--------------------+----------------------+
| title              | Number of Employees |
+--------------------+----------------------+
| Senior Staff       |                  612 |
| Staff              |                  703 |
| Technique Leader   |                   95 |
| Senior Engineer    |                  589 |
| Engineer           |                  657 |
| Assistant Engineer |                   97 |
+--------------------+----------------------+
6 rows in set (0.69 sec)

mysql>
```

Question 2:

```
+--------------------+-------------+
| title              | avg(salary) |
+--------------------+-------------+
| Senior Engineer    |  60543.2191 |
| Staff              |  69308.7124 |
| Engineer           |  59508.0751 |
| Senior Staff       |  70470.5013 |
| Assistant Engineer |  59304.9863 |
| Technique Leader   |  59294.3742 |
| Manager            |  66924.2706 |
+--------------------+-------------+
7 rows in set (7.04 sec)
```

Question 3:



```
+---------------+-----------+
| sum(s.salary) | dept_name |
+---------------+-----------+
|      54989098 | Marketing |
+---------------+-----------+
1 row in set (0.05 sec)
```

URL to GitHub Repository: