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:

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

SELECT
    t.title,
    count(t.title) AS 'employee count'
FROM titles t
JOIN employees e
    ON t.emp_no = e.emp_no
WHERE e.birth_date > '1965-01-01'
GROUP BY t.title

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

SELECT
    t.title,
    avg(s.salary) AS avg_salary
FROM titles t
JOIN salaries s
    ON t.emp_no = s.emp_no
GROUP BY t.title

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

SELECT
    sum(s.salary) AS salary_spent
FROM salaries s
JOIN dept_emp de
    ON s.emp_no = de.emp_no
WHERE de.dept_no = 'd001'
    AND s.from_date > '1990-01-01'
    AND s.from_date < '1993-01-01'
```

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

100	14:32:25	SELECT * FROM employees.salaries LIMIT 0, 1000	1000 row(s) returned
101	14:33:17	SELECT * FROM employees.departments LIMIT 0, 1000	9 row(s) returned
102	14:33:23	SELECT * FROM employees.dept_emp LIMIT 0, 1000	1000 row(s) returned
103	14:34:55	SELECT * FROM salaries LIMIT 0, 1000	1000 row(s) returned
104	14:36:46	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no LIMIT 0, 1000	1000 row(s) returned
105	14:37:24	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d WHERE dept_no = 'd001' LIMIT 0, 1000	Error Code: 1052. Column 'dept_no' in where clause is ambiguous
106	14:38:20	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON s.dept_no = d.dept_name WHERE dept_no = 'd...	Error Code: 1052. Column 'dept_no' in where clause is ambiguous
107	14:38:31	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON s.dept_no = d.dept_name WHERE s.dept_no =...	Error Code: 1054. Unknown column 's.dept_no' in 'where clause'
108	14:38:42	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON s.dept_no = d.dept_name WHERE d.dept_no =...	Error Code: 1054. Unknown column 's.dept_no' in 'on clause'
109	14:39:12	SELECT * FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON de.dept_no = d.dept_name WHERE d.dept_no...	0 row(s) returned
110	14:39:58	SELECT round(s.salary) FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON de.dept_no = d.dept_name -- W...	0 row(s) returned
111	14:40:25	SELECT round(s.salary) AS salary, dept_name FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no JOIN departments d ON de.dept...	0 row(s) returned
112	14:41:55	SELECT round(s.salary) AS salary, dept_name FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.de...	Error Code: 1054. Unknown column 'dept_name' in 'field list'
113	14:42:30	SELECT sum(s.salary) AS salary, FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.dept_no = d.dept_...	Error Code: 1064. You have an error in your SQL syntax; check the...
114	14:42:37	SELECT sum(s.salary) AS salary FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.dept_no = d.dept_n...	1 row(s) returned
115	14:43:03	SELECT sum(s.salary) AS salary_spent FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.dept_no = d....	1 row(s) returned
116	14:44:15	SELECT sum(s.salary) AS salary_spent FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.dept_no = d....	1 row(s) returned
117	14:44:31	SELECT sum(s.salary) AS salary_spent FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no -- JOIN departments d ON de.dept_no = d....	1 row(s) returned
118	14:52:40	SELECT t.title, count(t.title) AS 'employee count' FROM titles t JOIN employees e ON t.emp_no = e.emp_no WHERE e.birth_date > '1965-01-01'...	6 row(s) returned
119	14:52:44	SELECT t.title, avg(s.salary) AS avg_salary FROM titles t JOIN salaries s ON t.emp_no = s.emp_no GROUP BY t.title LIMIT 0, 1000	7 row(s) returned
120	14:52:54	SELECT sum(s.salary) AS salary_spent FROM salaries s JOIN dept_emp de ON s.emp_no = de.emp_no WHERE de.dept_no = 'd001' AND s.from_...	1 row(s) returned

URL to GitHub Repository: