

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

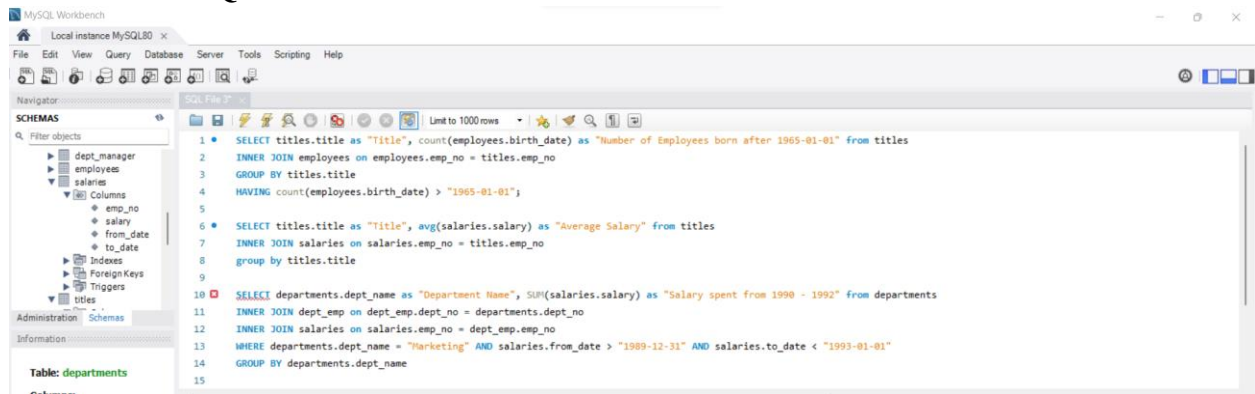
Instructions: Using a text editor of your choice, write the queries that accomplishes the objectives listed below. Take screenshots of the queries and results and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document to 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:



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

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- dept_manager
- employees
- salaries
- Columns
 - emp_no
 - salary
 - from_date
 - to_date
- Indexes
- Foreign Keys
- Triggers
- titles

Administration Schemas

Information

Table: departments

Columns:

dept_no char(4) PK

dept_name varchar(40)

SQL File 3

```

1 SELECT titles.title as "Title", count(employees.birth_date) as "Number of Employees born after 1965-01-01" from titles
2 INNER JOIN employees on employees.emp_no = titles.emp_no
3 GROUP BY titles.title
4 HAVING count(employees.birth_date) > "1965-01-01";
5
6 -- SELECT titles.title as "Title", avg(salaries.salary) as "Average Salary" from titles
7 -- INNER JOIN salaries on salaries.emp_no = titles.emp_no
8 -- group by titles.title
9
10 -- SELECT departments.dept_name as "Department Name", SUM(salaries.salary) as "Salary spent from 1990 - 1992" from departments
11

```

Result Grid

Title	Number of Employees born after 1965-01-01
Assistant Engineer	15128
Engineer	115000
Senior Engineer	97746
Staff	107386
Senior Staff	92849
Technique Leader	15159

Result 9

Output

Action Output

#	Time	Action	Message	Duration / Fetch
10	22:14:08	SELECT titles.title as "Title", avg(salaries.salary) as "Average Salary" from titles INNER JOIN salaries on salaries.emp_no = titles.emp_no	7 row(s) returned	6.469 sec / 0.000 sec
11	22:45:20	SELECT departments.dept_name as "Department Name", SUM(salaries.salary) as "Salary spent from 1990 - 1992" from departments	Error Code: 1054 Unknown column 'salaries.from_date' in having clause'	0.031 sec
12	22:49:50	SELECT departments.dept_name as "Department Name", SUM(salaries.salary) as "Salary spent from 1990 - 1992" from departments	1 row(s) returned	1.218 sec / 0.000 sec
13	16:37:08	SELECT departments.dept_name as "Department Name", SUM(salaries.salary) as "Salary spent from 1990 - 1992" from departments	1 row(s) returned	1.640 sec / 0.000 sec
14	16:38:27	SELECT titles.title as "Title", avg(salaries.salary) as "Average Salary" from titles INNER JOIN salaries on salaries.emp_no = titles.emp_no	7 row(s) returned	14.672 sec / 0.000 sec
15	16:39:31	SELECT titles.title as "Title", count(employees.birth_date) as "Number of Employees born after 1965-01-01" from titles	6 row(s) returned	2.187 sec / 0.000 sec

Object Info Session

4:39 PM 6/24/2022

MySQL Workbench

Local instance MySQL80

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```

Result Grid

Title	Average Salary
Assistant Engineer	59304.9863
Engineer	59508.1707
Senior Engineer	60543.2675
Staff	60308.6747
Senior Staff	70470.4825
Technique Leader	59294.3742
Manager	66924.2706

Result 8

Output

Action Output

#	Time	Action	Message	Duration / Fetch
9	22:14:08	SELECT titles.title as "Title", count(employees.birth_date) as "Number of Employees born after 1965-01-01" from titles	6 row(s) returned	0.781 sec / 0.000 sec
10	22:14:08	SELECT titles.title as "Title", avg(salaries.salary) as "Average Salary" from titles INNER JOIN salaries on salaries.emp_no = titles.emp_no	7 row(s) returned	6.469 sec / 0.000 sec
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4:39 PM 6/24/2022

MySQL Workbench

Local instance MySQL80 x

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8 -- group by titles.title
9
10 SELECT departments.dept_name as "Department Name", SUM(salaries.salary) as "Salary spent from 1990 - 1992" from departments
11 INNER JOIN dept_emp on dept_emp.dept_no = departments.dept_no
12 INNER JOIN salaries on salaries.emp_no = dept_emp.emp_no
13 WHERE departments.dept_name = "Marketing" AND salaries.from_date > "1989-12-31" AND salaries.to_date < "1993-01-01"
14 GROUP BY departments.dept_name
15

```

Result Grid

Department Name	Salary spent from 1990 - 1992
Marketing	1096024732

Export: Wrap Cell Content: 15

Result 7 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
8	22:11:21	SELECT titles title as "Title", count(employees.birth_date) as "Number of Employees born after 1965-01-01" from titles	6 row(s) returned	0.703 sec / 0.000 sec
9	22:14:08	SELECT titles title as "Title", count(employees.birth_date) as "Number of Employees born after 1965-01-01" from titles	6 row(s) returned	0.781 sec / 0.000 sec
10	22:14:08	SELECT titles title as "Title", avg(salaries.salary) as "Average Salary" from titles INNER JOIN salaries on salaries.emp_no = titles.emp_no	7 row(s) returned	6.469 sec / 0.000 sec
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URL to GitHub Repository: