Relational Databases with MySQL Week 2 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.

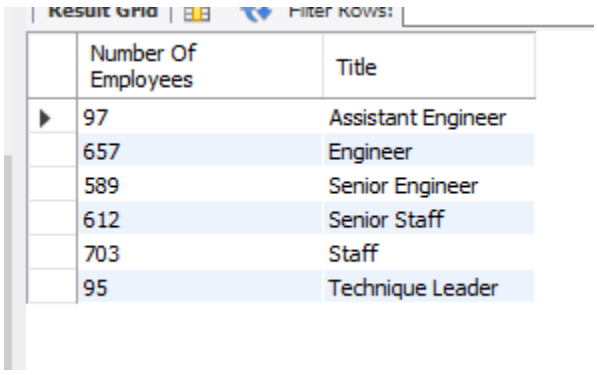
2. I want to know the average salary per title.

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

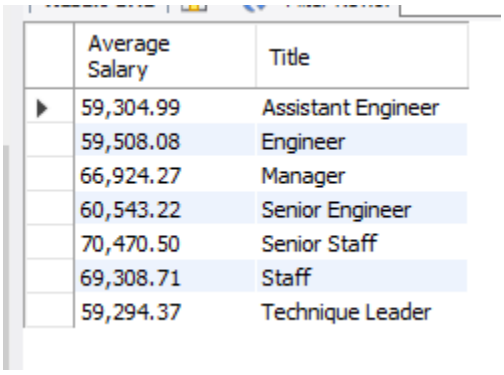
Screenshots of Queries:

```sql
use employees;

-- 1. I want to know how many employees with each title were born after 1965-01-01.
Select count(*) as "Number Of Employees", t.title as "Title"  from employees e
INNER JOIN titles t on t.emp_no = e.emp_no
Where birth_date > '1965-01-01'
group by(t.title)
order by(t.title);

-- 2. I want to know the average salary per title.
Select FORMAT(AVG(s.salary),2) as "Average Salary", t.title as "Title" from salaries s
-- FORMAT will format it with 2 decimal places
INNER JOIN titles t USING(emp_no)
-- using performs the same action like ON but only IF the key is the same
Group by(t.title)
order by(t.title);
-- to order alphabetical order

-- 3. How much money was spent on salary for the marketing department between the years 1990 and 1992?
Select FORMAT(sum(s.salary),2) as "Total Budget for 2 Years", d.dept_name as "Department" from departments d
INNER JOIN dept_emp d_e USING(dept_no)
INNER JOIN salaries s on s.emp_no = d_e.emp_no AND s.from_date <= '1992-01-01' AND s.from_date >= '1990-01-01'
-- when muplitple columns have the same key need to specify by in this case s.from_date
where d.dept_name = 'Marketing'
Group by(d.dept_name);
```

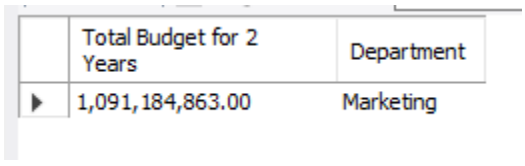
Screenshots of Query Results (only include the last 20 rows):



Number Of Employees	Title
97	Assistant Engineer
657	Engineer
589	Senior Engineer
612	Senior Staff
703	Staff
95	Technique Leader



Average Salary	Title
59,304.99	Assistant Engineer
59,508.08	Engineer
66,924.27	Manager
60,543.22	Senior Engineer
70,470.50	Senior Staff
69,308.71	Staff
59,294.37	Technique Leader



Total Budget for 2 Years	Department
1,091,184,863.00	Marketing

URL to GitHub Repository:

https://github.com/JoleneMel/Week2EmployeeSQL