Project

1. **Question: Find the maximum salary among female employees in the "Corporate" branch.**

   Query:- select branch_name 'Branch', max(salary)'Salary' from employees e1 inner join branches b1 ON e1.branch_id = b1.branch_id WHERE sex='F' and branch_name ='Corporate';

```
+-----------+-----------+
| Branch    | Salary    |
+-----------+-----------+
| Corporate | 110000.00 |
+-----------+-----------+
1 row in set (0.004 sec)
```

2. **Question: Retrieve the employee details along with the count of clients they work with, but only for employees with a salary greater than $50,000.**

   Query:- select emp_id,first_name, last_name , birth_date ,sex, salary, super_id, e1.branch_id, count(client_id) from employees e1 inner join clients c1 on e1.branch_id=c1.branch_id where salary>50000;

```
+--------+------------+-----------+------------+------+----------+----------+-----------+------------------+
| emp_id | first_name | last_name | birth_date | sex  | salary   | super_id | branch_id | count(client_id) |
+--------+------------+-----------+------------+------+----------+----------+-----------+------------------+
|    102 | Michael    | Scott     | 1964-03-15 | M    | 75000.00 |      100 |         2 |               25 |
+--------+------------+-----------+------------+------+----------+----------+-----------+------------------+
1 row in set (0.000 sec)
```

   Query:- select emp_id,first_name, last_name , birth_date ,sex, salary, super_id, e1.branch_id, client_id from employees e1 inner join clients c1 on e1.branch_id=c1.branch_id where salary>50000;

```
+--------+------------+-----------+------------+------+----------+----------+-----------+-----------+
| emp_id | first_name | last_name | birth_date | sex  | salary   | super_id | branch_id | client_id |
+--------+------------+-----------+------------+------+----------+----------+-----------+-----------+
|    102 | Michael    | Scott     | 1964-03-15 | M    | 75000.00 |      100 |         2 |       400 |
|    102 | Michael    | Scott     | 1964-03-15 | M    | 75000.00 |      100 |         2 |       401 |
|    102 | Michael    | Scott     | 1964-03-15 | M    | 75000.00 |      100 |         2 |       404 |
|    102 | Michael    | Scott     | 1964-03-15 | M    | 75000.00 |      100 |         2 |       406 |
|    103 | Angela     | Martin    | 1971-06-25 | F    | 63000.00 |      102 |         2 |       400 |
|    103 | Angela     | Martin    | 1971-06-25 | F    | 63000.00 |      102 |         2 |       401 |
|    103 | Angela     | Martin    | 1971-06-25 | F    | 63000.00 |      102 |         2 |       404 |
|    103 | Angela     | Martin    | 1971-06-25 | F    | 63000.00 |      102 |         2 |       406 |
|    104 | Kelly      | Kapoor    | 1980-02-05 | F    | 55000.00 |      102 |         2 |       400 |
|    104 | Kelly      | Kapoor    | 1980-02-05 | F    | 55000.00 |      102 |         2 |       401 |
|    104 | Kelly      | Kapoor    | 1980-02-05 | F    | 55000.00 |      102 |         2 |       404 |
|    104 | Kelly      | Kapoor    | 1980-02-05 | F    | 55000.00 |      102 |         2 |       406 |
|    105 | Stanley    | Hudson    | 1958-02-19 | M    | 69000.00 |      102 |         2 |       400 |
|    105 | Stanley    | Hudson    | 1958-02-19 | M    | 69000.00 |      102 |         2 |       401 |
|    105 | Stanley    | Hudson    | 1958-02-19 | M    | 69000.00 |      102 |         2 |       404 |
|    105 | Stanley    | Hudson    | 1958-02-19 | M    | 69000.00 |      102 |         2 |       406 |
|    106 | Josh       | Porter    | 1969-09-05 | M    | 78000.00 |      100 |         3 |       402 |
|    106 | Josh       | Porter    | 1969-09-05 | M    | 78000.00 |      100 |         3 |       403 |
|    106 | Josh       | Porter    | 1969-09-05 | M    | 78000.00 |      100 |         3 |       405 |
|    107 | Andy       | Bernard   | 1973-07-22 | M    | 65000.00 |      106 |         3 |       402 |
|    107 | Andy       | Bernard   | 1973-07-22 | M    | 65000.00 |      106 |         3 |       403 |
|    107 | Andy       | Bernard   | 1973-07-22 | M    | 65000.00 |      106 |         3 |       405 |
|    108 | Jim        | Halpert   | 1978-10-01 | M    | 71000.00 |      106 |         3 |       402 |
|    108 | Jim        | Halpert   | 1978-10-01 | M    | 71000.00 |      106 |         3 |       403 |
|    108 | Jim        | Halpert   | 1978-10-01 | M    | 71000.00 |      106 |         3 |       405 |
+--------+------------+-----------+------------+------+----------+----------+-----------+-----------+
25 rows in set (0.001 sec)
```

3. **Question: Find the average salary of employees in the "Scranton" branch who are male.**
   Query:- select avg(salary) from employees e1 inner join branches b1 on e1.branch_id=b1.branch_id where sex='M' and branch_name='Scranton';

```
+--------------+
| avg(salary)  |
+--------------+
| 72000.000000 |
+--------------+
1 row in set (0.000 sec)
```

4. **Retrieve the count of clients for each branch where the count is greater than 5**

   select count(*) from clients group by branch_id having count(*)> 5;

```
MariaDB [projxt]> select count(*) from clients group by branch_id having count(*)> 5;
Empty set (0.000 sec)
```

5. **Question: Find the total sales made by each employee in the "Corporate" branch who has made sales exceeding $100,000.**

   Query:- select total_sales from sales s inner join branches b inner join employees e on e.emp_id=s.emp_id=b.mgr_id group by branch_name having branch_name='corporate';

```
MariaDB [project]> select total_sales from sales s inner join branches b inn
er join employees e on e.emp_id=s.emp_id=b.mgr_id group by branch_name havin
g branch_name='corporate';
Empty set (0.001 sec)
```

6. **Question: Retrieve the total sales for each client in the "Corporate" branch.**

   Query:- select client_id , total_sales from sales s inner join br

   anches b on mgr_id=emp_id where branch_name='Corporate' group by client_id;

```
MariaDB [project]> select client_id , total_sales from sales s inner join br
anches b on mgr_id=emp_id where branch_name='Corporate' group by client_id;
Empty set (0.001 sec)
```

7. **Question: Retrieve details of female employees with a salary above $70,000.**

   Query:- select * from employees where sex='F' and salary>70000;

```
MariaDB [project]> select * from employees where sex='F' and salary>70000;
+--------+------------+-----------+------------+------+-----------+----------+-----------+
| emp_id | first_name | last_name | birth_date | sex  | salary    | super_id | branch_id |
+--------+------------+-----------+------------+------+-----------+----------+-----------+
|    101 | Jan        | Levinson  | 1961-05-11 | F    | 110000.00 |      100 |         1 |
+--------+------------+-----------+------------+------+-----------+----------+-----------+
1 row in set (0.002 sec)
```

8. **Question: Find the clients whose names start with 'T'.**

Query:-

select client_name from clients where client_name like 'T%';

```
MariaDB [project]> select client_name from clients where client_name like 'T%';
+-----------------+
| client_name     |
+-----------------+
| Times Newspaper |
+-----------------+
1 row in set (0.002 sec)
```

9. **Question: Get the names of employees sorted by their salary in descending order.**

Query:- select first_name,last_name from employees order by salary desc;

```
MariaDB [project]> select first_name,last_name from employees order by salary desc;
+------------+-----------+
| first_name | last_name |
+------------+-----------+
| David      | Wallace   |
| Jan        | Levinson  |
| Josh       | Porter    |
| Michael    | Scott     |
| Jim        | Halpert   |
| Stanley    | Hudson    |
| Andy       | Bernard   |
| Angela     | Martin    |
| Kelly      | Kapoor    |
+------------+-----------+
9 rows in set (0.002 sec)
```

10. **Question: Retrieve a list of clients sorted alphabetically by their names.**

Query:- select client_name from clients order by client_name;

```
MariaDB [project]> select client_name from clients order by client_name;
+----------------------+
| client_name          |
+----------------------+
| Dunmore Highschool   |
| FedEx                |
| FedEx                |
| John Daly Law, LLC   |
| Lackawana Country    |
| Scranton Whitepages  |
| Times Newspaper      |
+----------------------+
7 rows in set (0.001 sec)
```

11. **Question: Find the total sales for each client, ordered by the highest sales first.**

Query:- SELECT client_id,total_sales FROM sales GROUP BY client_id ORDER BY total_sales DESC;

```
MariaDB [project]> SELECT client_id,total_sales FROM sales GROUP BY client_id ORDER BY total_sales DESC;
+-----------+-------------+
| client_id | total_sales |
+-----------+-------------+
|       401 |   267000.00 |
|       400 |    55000.00 |
|       404 |    33000.00 |
|       405 |    26000.00 |
|       402 |    22500.00 |
|       406 |    15000.00 |
|       403 |     5000.00 |
+-----------+-------------+
7 rows in set (0.015 sec)
```

12. **Question: Retrieve the employee details whose last names end with 'son'.**

Query:- select * from employees where last_name like '%son';

```
MariaDB [project]> select * from employees where last_name like '%son';
+--------+------------+-----------+------------+------+-----------+----------+-----------+
| emp_id | first_name | last_name | birth_date | sex  | salary    | super_id | branch_id |
+--------+------------+-----------+------------+------+-----------+----------+-----------+
|    101 | Jan        | Levinson  | 1961-05-11 | F    | 110000.00 |      100 |         1 |
|    105 | Stanley    | Hudson    | 1958-02-19 | M    |  69000.00 |      102 |         2 |
+--------+------------+-----------+------------+------+-----------+----------+-----------+
2 rows in set (0.001 sec)
```

13. **Question: Get a list of supplier names that contain the word 'Paper' anywhere in their name.**

Query:- select supplier_name from suppliers where supplier_name like '%paper%';

```
MariaDB [project]> select supplier_name from suppliers where supplier_name like '%paper%';
+---------------+
| supplier_name |
+---------------+
| Patriot Paper |
+---------------+
1 row in set (0.001 sec)
```

14. **Question: Retrieve the employee names and salaries, ordered by salary in ascending order.**

Query:- select first_name , last_name, salary from employees order by salary;

```
MariaDB [project]> select first_name , last_name, salary from employees order by salary;
+------------+-----------+-----------+
| first_name | last_name | salary    |
+------------+-----------+-----------+
| Kelly      | Kapoor    |  55000.00 |
| Angela     | Martin    |  63000.00 |
| Andy       | Bernard   |  65000.00 |
| Stanley    | Hudson    |  69000.00 |
| Jim        | Halpert   |  71000.00 |
| Michael    | Scott     |  75000.00 |
| Josh       | Porter    |  78000.00 |
| Jan        | Levinson  | 110000.00 |
| David      | Wallace   | 250000.00 |
+------------+-----------+-----------+
9 rows in set (0.001 sec)
```

15. **Question: Get a list of branch names in alphabetical order.**

Query:- select branch_name from branches order by branch_name;

```
MariaDB [project]> select branch_name from branches order by branch_name;
+-------------+
| branch_name |
+-------------+
| Corporate   |
| Scranton    |
| Stamford    |
+-------------+
3 rows in set (0.001 sec)
```

16. **Question: Get a list of supplier names and their supply types, ordered by supply types.**

Query:- select supplier_name ,supply_type from suppliers order by supply_type;

```
MariaDB [project]> select supplier_name ,supply_type from suppliers order by supply_type;
+--------------------+------------------+
| supplier_name      | supply_type      |
+--------------------+------------------+
| J.T. Forms & Labels | Custom Forms     |
| Stamford Lables    | Custom Forms     |
| Hammer Mill        | Paper            |
| Patriot Paper      | Paper            |
| Hammer Mill        | Paper            |
| Uni-ball           | Writing Utensils |
| Uni-ball           | Writing Utensils |
+--------------------+------------------+
7 rows in set (0.001 sec)
```

17. **Question: Find the average salary for each gender (male and female).**

Query:- select avg(salary) from employees;

```
MariaDB [project]> select avg(salary) from employees;
+--------------+
| avg(salary)  |
+--------------+
| 92888.888889 |
+--------------+
1 row in set (0.001 sec)
```

18. **Question: Retrieve the number of clients for each branch.**

Query:- select branch_id,count(client_id) from clients group by branch_id;se

```
MariaDB [project]> select branch_id,count(client_id) from clients group by branch_id;
+-----------+------------------+
| branch_id | count(client_id) |
+-----------+------------------+
|         2 |                4 |
|         3 |                3 |
+-----------+------------------+
2 rows in set (0.001 sec)
```

19. **Question: Find the maximum total sales for each client.**

Query:- select client_id,max(total_sales) from sales group by client_id;

```
MariaDB [project]> select client_id,max(total_sales) from sales group by client_id;
+-----------+------------------+
| client_id | max(total_sales) |
+-----------+------------------+
|       400 |         55000.00 |
|       401 |        267000.00 |
|       402 |         22500.00 |
|       403 |         12000.00 |
|       404 |         33000.00 |
|       405 |         26000.00 |
|       406 |        130000.00 |
+-----------+------------------+
7 rows in set (0.001 sec)
```

20. **Question: Get a list of branch names and the total number of employees in each branch.**

Query:- select branch_name , count(emp_id) 'No of Employees' from branches b inner join employees e on emp_id =mgr_id group by emp_id;

```
MariaDB [project]> select branch_name , count(emp_id) 'No of Employees'  fro
m branches b inner join employees e on emp_id =mgr_id group by emp_id;
+-------------+-----------------+
| branch_name | No of Employees |
+-------------+-----------------+
| Corporate   |               1 |
| Scranton    |               1 |
| Stamford    |               1 |
+-------------+-----------------+
3 rows in set (0.001 sec)
```

21. **Question: Retrieve the number of clients each employee works with.**

Query:- select first_name ,count(client_id)'No of Clients' from clients c inner join employees e on c.branch_id=e.branch_id group by emp_id;

```
MariaDB [project]> select first_name ,count(client_id)'No of Clients' from c
lients c inner join employees e on c.branch_id=e.branch_id group by emp_id;
+------------+---------------+
| first_name | No of Clients |
+------------+---------------+
| Michael    |             4 |
| Angela     |             4 |
| Kelly      |             4 |
| Stanley    |             4 |
| Josh       |             3 |
| Andy       |             3 |
| Jim        |             3 |
+------------+---------------+
7 rows in set (0.001 sec)
```

22. **Question: Find the average birth year for employees in each branch.**

Query:- select branch_id ,avg(year(birth_date)) from employees group by branch_id;

```
MariaDB [project]> select branch_id ,avg(year(birth_date)) from employees gr
oup by branch_id;
+-----------+-----------------------+
| branch_id | avg(year(birth_date)) |
+-----------+-----------------------+
|         1 |             1964.0000 |
|         2 |             1968.2500 |
|         3 |             1973.3333 |
+-----------+-----------------------+
3 rows in set (0.001 sec)
```