Assignment 17

Create a table of Employees with below mentioned fields and insert the data and then write the queries to the below questions.

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
100	Steven	King	SKING	515.123.4567	1987-06-17	AD_PRES	24000.00	0.00	0	90
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1987-06-18	AD_VP	17000.00	0.00	100	90
102	Lex	De Haan	LDEHAAN	515.123.4569	1987-06-19	AD_VP	17000.00	0.00	100	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	1987-06-20	IT_PROG	9000.00	0.00	102	60
104	Bruce	Ernst	BERNST	590.423.4568	1987-06-21	IT_PROG	6000.00	0.00	103	60
105	David	Austin	DAUSTIN	590.423.4569	1987-06-22	IT_PROG	4800.00	0.00	103	60
106	Valli	Pataballa	VPATABAL	590.423.4560	1987-06-23	IT_PROG	4800.00	0.00	103	60
107	Diana	Lorentz	DLORENTZ	590.423.5567	1987-06-24	IT_PROG	4200.00	0.00	103	60
108	Nancy	Greenberg	NGREENBE	515.124.4569	1987-06-25	FI_MGR	12000.00	0.00	101	100
109	Daniel	Faviet	DFAVIET	515.124.4169	1987-06-26	FI_ACCOUNT	9000.00	0.00	108	100
110	John	Chen	JCHEN	515.124.4269	1987-06-27	FI_ACCOUNT	8200.00	0.00	108	100
111	Ismael	Sciarra	ISCIARRA	515.124.4369	1987-06-28	FI_ACCOUNT	7700.00	0.00	108	100
112	Jose Manuel	Urman	JMURMAN	515.124.4469	1987-06-29	FI_ACCOUNT	7800.00	0.00	108	100
113	Luis	Popp	LPOPP	515.124.4567	1987-06-30	FI_ACCOUNT	6900.00	0.00	108	100

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|         114 | Den          | Raphaely    | DRAPHEAL | 515.127.4561
| 1987-07-01 | PU_MAN     | 11000.00 |           0.00 |        100 |
30 |
|         115 | Alexander    | Khoo        | AKHOO    | 515.127.4562
| 1987-07-02 | PU_CLERK   |  3100.00 |           0.00 |        114 |
30 |
```

1. Write a query to list the number of jobs available in the employees table

Query :- select count(JobId) as NumberOfJobs from employees;

Output:-

```
+--------------+
| NumberOfJobs |
+--------------+
|           16 |
+--------------+
1 row in set (0.00 sec)
```

2. Write a query to get the total salaries payable to employees.

Query: - select sum(Salary) as TotalSalary from employees;

Output:-

```
+-------------+
| TotalSalary |
+-------------+
|      152500 |
+-------------+
1 row in set (0.00 sec)
```

3. Write a query to get the minimum salary from employees table.

Query:- select min(Salary) as MinimumSalary from employees;

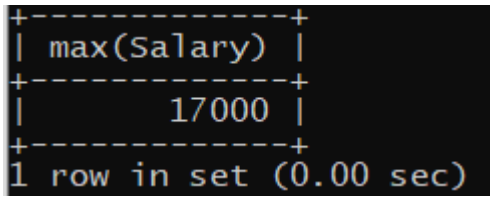
Output:-

```
+---------------+
| MinimumSalary |
+---------------+
|          3100 |
+---------------+
1 row in set (0.00 sec)
```

4. Write a query to get the maximum salary of an employee working as a Programmer.

Query:- select max(Salary) from employees where JobId = 'It_Prog';

Output:-

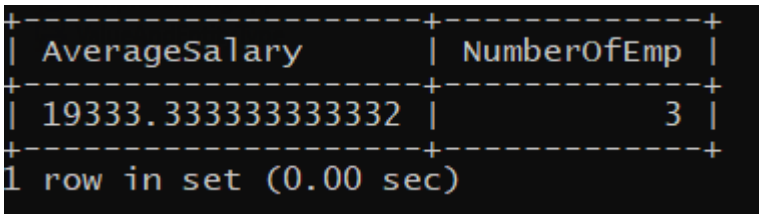


```
+-------------+
| max(Salary) |
+-------------+
|       17000 |
+-------------+
1 row in set (0.00 sec)
```

5. Write a query to get the average salary and number of employees working the department 90.

Query :- select avg(Salary)as AverageSalary, count(EmpId)as NumberOfEmp from employees where DeptId = 90;

Output:-

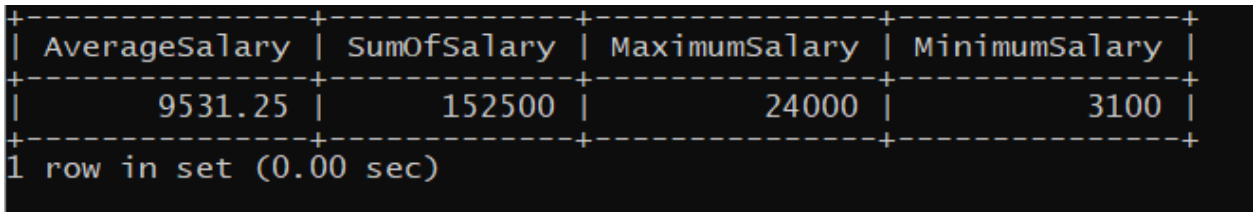


```
+--------------------+-------------+
| AverageSalary      | NumberOfEmp |
+--------------------+-------------+
| 19333.333333333332 |           3 |
+--------------------+-------------+
1 row in set (0.00 sec)
```

6. Write a query to get the highest, lowest, sum, and average salary of all employees.

Query :- select avg(Salary) as AverageSalary, sum(Salary) as SumOfSalary, max(Salary)as MaximumSalary, min(Salary)as MinimumSalary from employees;

Output:-

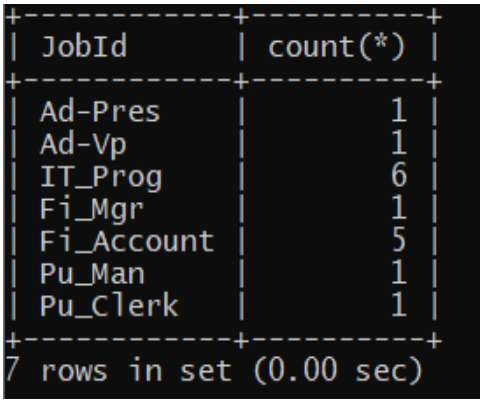


```
+---------------+-------------+---------------+---------------+
| AverageSalary | SumOfSalary | MaximumSalary | MinimumSalary |
+---------------+-------------+---------------+---------------+
|       9531.25 |      152500 |         24000 |          3100 |
+---------------+-------------+---------------+---------------+
1 row in set (0.00 sec)
```

7. Write a query to get the number of employees with the same job.

Query:- Select JobId, count(*) from employees group by(JobId);

Output:-



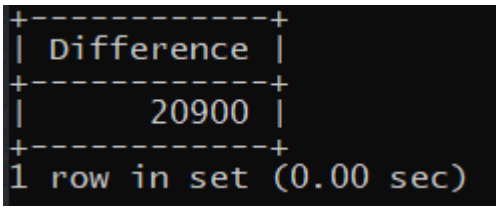
JobId	count(*)
Ad-Pres	1
Ad-Vp	1
IT_Prog	6
Fi_Mgr	1
Fi_Account	5
Pu_Man	1
Pu_Clerk	1

7 rows in set (0.00 sec)

8. Write a query to get the difference between the highest and lowest salaries.

Query:- Select max(Salary) - min(Salary) Difference from employees;

Output:-



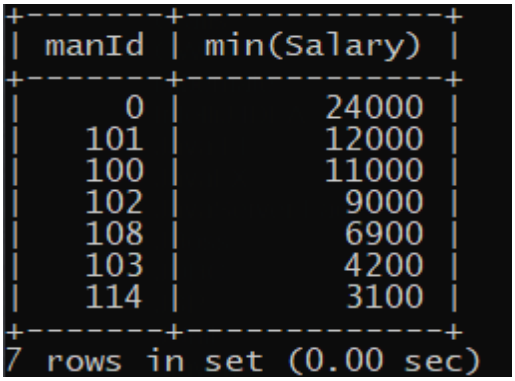
Difference
20900

1 row in set (0.00 sec)

9. Write a query to find the manager ID and the salary of the lowest-paid employee for that manager.

Query:- Select manId, min(Salary)from employees where manId is not null group by manId order by min(Salary)desc;

Output:-



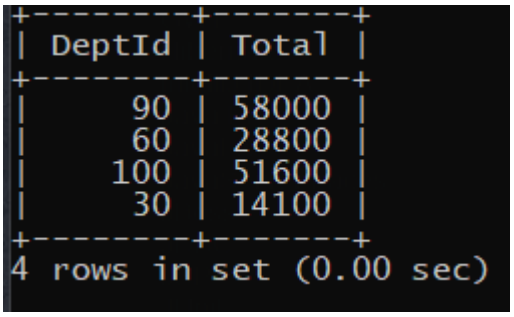
manId	min(Salary)
0	24000
101	12000
100	11000
102	9000
108	6900
103	4200
114	3100

7 rows in set (0.00 sec)

10. Write a query to get the department ID and the total salary payable in each department.

Query :- Select DeptId, sum(Salary) as Total from employees group by DeptId;

Output:-



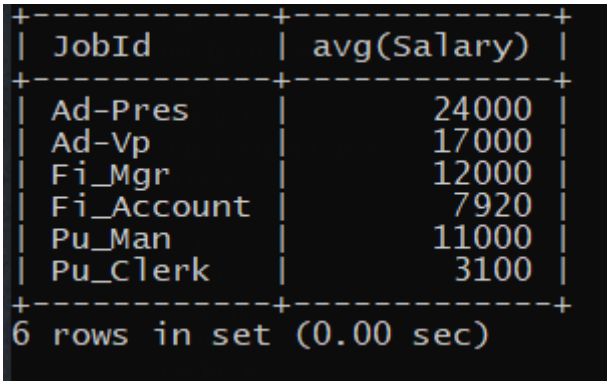
DeptId	Total
90	58000
60	28800
100	51600
30	14100

4 rows in set (0.00 sec)

11. Write a query to get the average salary for each job ID excluding programmer.

Query :- select JobId, avg(Salary) from employees where JobId<> 'It_Prog' group by JobId;

Output :-



JobId	avg(Salary)
Ad-Pres	24000
Ad-Vp	17000
Fi_Mgr	12000
Fi_Account	7920
Pu_Man	11000
Pu_Clerk	3100

6 rows in set (0.00 sec)

12. Write a query to get the total salary, maximum, minimum, average salary of employees (job ID wise), for department ID 90 only.

Query:- select JobId, sum(Salary)as Total, max(Salary)as MaximumSalary, min(Salary)as MinimumSalary, avg(Salary)as AverageSalary from employees where DeptId=90 group by JobId;

Output:-

JobId	Total	MaximumSalary	MinimumSalary	AverageSalary
Ad-Pres	24000	24000	24000	24000
Ad-Vp	17000	17000	17000	17000
IT_Prog	17000	17000	17000	17000

3 rows in set (0.00 sec)

13. Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to $4000.

Query:- select JobId, max(Salary) from employees group by JobId Having max(Salary) >= 4000;

JobId	max(Salary)
Ad-Pres	24000
Ad-Vp	17000
IT_Prog	17000
Fi_Mgr	12000
Fi_Account	9000
Pu_Man	11000

6 rows in set (0.00 sec)

14. Write a query to get the average salary for all departments employing more than 10 employees.

Query:- select avg(Salary), count(*) from employees group by DeptId having count(*)>10;

Output:- Empty set (0.00 sec)