Information Systems: Labwork 5

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Labwork 5

What is the average salary of each employee?

```
1  SELECT EMP_NO, AVG(SALARY) FROM SALARIES GROUP BY EMP_NO;
```

Output:

```
1  ...
2  |  499996  |   63134.1429  |
3  |  499997  |   66475.8667  |
4  |  499998  |   46665.5556  |
5  |  499999  |   70625.0000  |
6  +---------+---------------+
7  300024 rows in set (2.18 sec)
```

How much was each employee paid in total?

```
1  SELECT EMP_NO, SUM(SALARY) FROM SALARIES GROUP BY EMP_NO;
```

Output:

```
1  ...
2  |  499996  |       441939  |
3  |  499997  |       997138  |
4  |  499998  |       419990  |
5  |  499999  |       353125  |
6  +---------+---------------+
7  300024 rows in set (2.18 sec)
```

Minimum, maximum and total salaries of each department?

```
1  SELECT DEPT_NO, MIN(SALARY) , MAX(SALARY) , SUM(SALARY)
2  FROM DEPT_EMP JOIN SALARIES ON DEPT_EMP.EMP_NO = SALARIES.EMP_NO
3  GROUP BY DEPT_NO;
```

Output:

```
1  +---------+-------------+-------------+-------------+
2  | DEPT_NO | MIN(SALARY) | MAX(SALARY) | SUM(SALARY) |
3  +---------+-------------+-------------+-------------+
4  | d001    |       39127 |      145128 | 13725425266 |
5  | d002    |       38812 |      142395 | 11650834677 |
6  | d003    |       38735 |      141953 |  9363811425 |
7  | d004    |       38623 |      138273 | 41554438942 |
8  | d005    |       38849 |      144434 | 48179456393 |
9  | d006    |       38786 |      132103 | 10865203635 |
10 | d007    |       39169 |      158220 | 40030089342 |
11 | d008    |       38851 |      130211 | 11969730427 |
12 | d009    |       38836 |      144866 | 13143639841 |
13 +---------+-------------+-------------+-------------+
14 9 rows in set (11.31 sec)
```

Which departments have paid more than 20 Billion dollars for their employees?

```
1  SELECT DEPT_NO, SUM(SALARY) AS TOTAL
2  FROM DEPT_EMP JOIN SALARIES ON DEPT_EMP.EMP_NO = SALARIES.EMP_NO
3  GROUP BY DEPT_NO HAVING TOTAL > 20000000000;
```

Output:

```
1 +—————+————————+
2 | DEPT_NO | TOTAL        |
3 +—————+————————+
4 | d004    | 41554438942  |
5 | d005    | 48179456393  |
6 | d007    | 40030089342  |
7 +—————+————————+
8 3 rows in set (11.35 sec)
```

Total salaries of male employees in each department?

```
1 SELECT DEPT_NO, SUM(SALARY) FROM DEPT_EMP
2     JOIN EMPLOYEES ON DEPT_EMP.EMP_NO = EMPLOYEES.EMP_NO AND GENDER = 'M'
3     JOIN SALARIES ON DEPT_EMP.EMP_NO = SALARIES.EMP_NO
4 GROUP BY DEPT_NO;
```

Output:

```
1  +—————+———————————+
2  | DEPT_NO | SUM(SALARY) |
3  +—————+———————————+
4  | d001    |  8352455367 |
5  | d002    |  6940675318 |
6  | d003    |  5619533959 |
7  | d004    | 24873889749 |
8  | d005    | 28961357095 |
9  | d006    |  6472073211 |
10 | d007    | 24051537190 |
11 | d008    |  7174578852 |
12 | d009    |  7865587983 |
13 +—————+———————————+
14 9 rows in set (9.96 sec)
```

Total salaries of department managers for each department, from highest to lowest?

```
1 SELECT DEPT_NO, SUM(SALARY) AS TOTAL FROM DEPT_MANAGER
2     JOIN SALARIES ON DEPT_MANAGER.EMP_NO = SALARIES.EMP_NO
3 GROUP BY DEPT_NO ORDER BY TOTAL DESC;
```

Output:

```
1  +—————+—————————+
2  | DEPT_NO | TOTAL   |
3  +—————+—————————+
4  | d006    | 4162118 |
5  | d004    | 3374004 |
6  | d009    | 3187661 |
7  | d001    | 3093009 |
8  | d007    | 2915118 |
9  | d008    | 2558661 |
10 | d002    | 2549372 |
11 | d003    | 2098298 |
12 | d005    | 2028376 |
13 +—————+—————————+
14 9 rows in set (0.02 sec)
```