

## Exercise 1- Group by, Join and Subqueries

1. Using a subquery select all employee whose salary is higher than the salary of employee 7698. Show the employee name, job and salary.
2. Select the employee name, salary and department number of employees who corresponds to the minimum salary of the departments when grouped together. In other words these employees has the lowest salary from all departments. Use a subquery.

The resulting query should be as follows:

ENAME	SAL	DEPTNO
SMITH	800	20
JAMES	950	30
MILLER	1300	10

3. Compute the average salary per job. Filter the results further by showing only the average salary that is equal to the minimum average salary per job.

The results would be similar below:

JOB	AVG(SAL)
CLERK	1037.5

4. Show ename, sal and deptno of all employees whose salary corresponds to the maximum salary when grouped by department number. The inner query will return more than one records as it chooses the maximum salary per department.

The results should be as follows:

ENAME	SAL	DEPTNO
KING	5000	10
BLAKE	2850	30
SCOTT	3000	20

5. Show the ename, sal, job of employees whose salary is less than the salary of an employee with a job of a clerk. This means the clerk job should be included in the results.

The results should be as follows:

ENAME	SAL	JOB
WARD	1250	SALESMAN
MARTIN	1250	SALESMAN

2 rows returned in 0.01 seconds [Download](#)

6. Select the ename, sal and job of employees where salary is greater than average salary of employees grouped per department.

The results should be as follows:

ENAME	SAL	JOB
JONES	2975	MANAGER
SCOTT	3000	ANALYST
KING	5000	PRESIDENT
FORD	3000	ANALYST

7. Show the ename, sal and deptname. Use a subquery after the select statement to show the department name. This means the subquery will not in the where clause or the at the from clause.

Hint:

select ename, sal, \_\_\_\_\_from emp

Put the subquery where the blank is.

8. Using union operator combine the two tables based on the city field.

The results should be as follows:

10
20
30
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9. Using the intersect operator, extract the department of employees who have a commission.

The results should be as follows:

10
20
30

10. Using the minus operator extract the department that is not present in the emp table.

The results should be as follows:

Results	Explain	Describe	SQL
40			

1 rows returned in 0.00 seconds

11. Using left outer join, join the emp with the dept table. The result will show one department code that does not have an employee.

```
select emp.ename, dept.deptno from emp RIGHT JOIN dept on  
emp.deptno=dept.deptno;
```

TURNER	30
JAMES	30
	40