

SQL Commands Assessment

Q1) WAQ to display second highest salary in HR schema.

```
select max(salary) from employees where salary < (select max(salary) from employees);
```

```
max
-----
17000.00
(1 row)
```

Q2) WAQ to display name of employee who is earning maximum in his/her department.

```
select department_id, first_name, salary from employees d where salary = (select max(salary) from employees where department_id = d.department_id);
```

```
department_id | first_name | salary
-----+-----+-----
          90 | Steven    | 24000.00
          60 | Alexander | 9000.00
         100 | Nancy     | 12000.00
```

30	Den	11000.00
50	Adam	8200.00
80	John	14000.00
10	Jennifer	4400.00
20	Michael	13000.00
40	Susan	6500.00
70	Hermann	10000.00
110	Shelley	12000.00

(11 rows)

Q3) WAQ to display employees count who are working from same location.

```
select l.city, count(*) from employees e, locations l, departments d where
e.department_id = d.department_id and d.location_id = l.location_id group
by(l.location_id);
```

city		count
Toronto		2
South San Francisco		45
Oxford		34
London		1
Munich		1
Seattle		18
Southlake		5

(7 rows)

Q4) WAQ to display number of employees joined year wise.

```
select to_char(hire_date,'yyyy') hire_year, count(*) from employees group  
by(to_char(hire_date,'yyyy'));
```

hire_year	count
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1996	10
1990	1
2000	11
1994	7
1987	2
1993	1
1997	28
1991	1
1989	1
1998	23
1995	4
1999	18

(12 rows)

Q5) WAQ to top 2 earning employee name and salary in each department.

```
select first_name, salary, department_id from employees e1 where 2 > ( select  
count(distinct salary) from employees e2 where e2.salary > e1.salary and  
e1.department_id = e2.department_id);
```

first_name	salary	department_id
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-----+-----+-----

Steven	24000.00	90
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Neena	17000.00	90
-------	----------	----

Lex	17000.00	90
-----	----------	----

Alexander	9000.00	60
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Bruce	6000.00	60
-------	---------	----

Nancy	12000.00	100
-------	----------	-----

Daniel	9000.00	100
--------	---------	-----

Den	11000.00	30
-----	----------	----

Alexander	3100.00	30
-----------	---------	----

Matthew	8000.00	50
---------	---------	----

Adam	8200.00	50
------	---------	----

John	14000.00	80
------	----------	----

Karen	13500.00	80
-------	----------	----

Kimberely	7000.00	
-----------	---------	--

Jennifer	4400.00	10
----------	---------	----

Michael	13000.00	20
---------	----------	----

Pat	6000.00	20
-----	---------	----

Susan	6500.00	40
-------	---------	----

Hermann | 10000.00 | 70

Shelley | 12000.00 | 110

William | 8300.00 | 110

(21 rows)