

# Lab 6

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## Assignment 1

### Q1.

```
mysql> select emp_name, doj from employee
      -> where emp_dept = (select distinct emp_dept from employee
[      -> where emp_name = "Mark") and emp_name != "Mark";
+-----+-----+
| emp_name | doj      |
+-----+-----+
| Linklon  | 2008-08-08 |
| Linklon  | 2000-01-01 |
+-----+-----+
2 rows in set (0.01 sec)
```

### Q2.

```
mysql> select emp_id, emp_name
      -> from employee
      -> where income >
      -> (select avg(income) from employee)
[      -> order by income desc;
+-----+-----+
| emp_id | emp_name |
+-----+-----+
| 2514   | Vasin    |
| 2524   | Vasin    |
| 2513   | Manas    |
| 2523   | Manas    |
| 2511   | Adam     |
| 2521   | Adam     |
| 2508   | Obama    |
| 2518   | Obama    |
+-----+-----+
8 rows in set (0.00 sec)
```

**Q3.**

```
[mysql> select emp_id, emp_name from employee
[      -> where emp_dept in
[      -> (select emp_dept from employee
[      -> where emp_name like "%n%");
```

```
+-----+-----+
| emp_id | emp_name |
+-----+-----+
| 2505   | peter    |
| 2506   | Mark     |
| 2507   | Donald   |
| 2509   | Linklon  |
| 2510   | Kane     |
| 2512   | Mac      |
| 2513   | Manas    |
| 2514   | Vasin    |
| 2515   | peter    |
| 2516   | Mark     |
| 2517   | Donald   |
| 2519   | Linklon  |
| 2520   | Kane     |
| 2522   | Mac      |
| 2523   | Manas    |
| 2524   | Vasin    |
+-----+-----+
16 rows in set (0.01 sec)
```

**Q4.**

```
mysql> select emp_name, emp_dept, doj from employee
[      -> where emp_id in (select emp_id from employee where place = "india");
```

```
+-----+-----+-----+
| emp_name | emp_dept | doj      |
+-----+-----+-----+
| Manas    | Accounts | 1990-12-11 |
| Vasin    | Accounts | 1989-10-10 |
| Manas    | Accounts | 1980-03-25 |
| Vasin    | Accounts | 2002-08-25 |
+-----+-----+-----+
4 rows in set (0.01 sec)
```

## Q5.

```
[mysql> select max(income) from employee where
-> income != (select max(income) from employee);
+-----+
| max(income) |
+-----+
|         600000 |
+-----+
1 row in set (0.00 sec)
```

## Assignment 2

### Q1.

```
[mysql> select * from sailors
-> where sid in
-> (select sid from reserves
-> where bid = 101);
+-----+-----+-----+-----+
| sid | sname | rating | age |
+-----+-----+-----+-----+
| 22 | Dustin | 7 | 45 |
| 64 | Horatio | 7 | 35 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

### Q2.

```
mysql> select bname from boats
-> where bid in (
-> select bid from reserves
-> where sid in
-> (select distinct sid from sailors
-> where sname = "Bob")
-> );
Empty set (0.00 sec)
```

### Q3.

```
mysql> select sname from sailors
      -> where sid in (
      -> select sid from reserves
      -> where bid in
      -> (select bid from boats
      -> where color = 'red')
      -> );
+-----+
| sname |
+-----+
| Dustin |
| Lubber |
| Horatio |
+-----+
3 rows in set (0.00 sec)
```

### Q4.

```
[mysql> select sname from sailors
[      -> where sid in
[      -> (select sid from reserves);
+-----+
| sname |
+-----+
| Dustin |
| Lubber |
| Horatio |
| Horatio |
+-----+
4 rows in set (0.00 sec)
```

### Q5.

```
mysql> select sid,sname from sailors
      -> where sid in
      -> (select sid from reserves r1
      -> where sid in
      -> (select sid from reserves r2
      -> where r1.day = r2.day and r1.bid != r2.bid));
+-----+-----+
| sid | sname |
+-----+-----+
| 22 | Dustin |
+-----+-----+
1 row in set (0.01 sec)
```



**Q6.**

```
[mysql> select distinct sid from reserves
[   -> where bid in
[   -> (select bid from boats
[   -> where color="red" or color="green");
+-----+
| sid |
+-----+
| 22 |
| 31 |
| 64 |
| 74 |
+-----+
4 rows in set (0.01 sec)
```

**Q7.**

```
[mysql> select sname, age
[   -> from sailors
[   -> where age <= all
[   -> (select age from sailors);
+-----+-----+
| sname | age |
+-----+-----+
| Zorba | 16 |
+-----+-----+
1 row in set (0.01 sec)
```

**Q8.**

```
[mysql> select count(distinct sname) from sailors
[   -> where sname in
[   -> (select sname from sailors);
+-----+
| count(distinct sname) |
+-----+
| 9 |
+-----+
1 row in set (0.01 sec)
```

**Q9.**

```
[mysql> select rating, age from
[      -> (select rating, avg(age) as age
[      -> from sailors
[      -> group by rating)
[      -> as ans group by rating;
```

rating	age
7	40
1	33
8	29.5
10	25.5
9	40
3	44.5

6 rows in set (0.01 sec)

**Q10.**

```
mysql> select age from
[      -> (select avg(age) as age from sailors
[      -> group by rating
[      -> having count(*) >= 2) as ans;
```

age
40
29.5
25.5
44.5

4 rows in set (0.00 sec)