DBMS Tutorial 7/11/19

1. Consider the example where you know details of employees under Accounts department.
   Consider tables:

```
+------------------+-----------------+---------+-----------------
| EMP_ID    | EMMP_NAME | AGEG | PHONE_NUM     | DEPT_ID | SALARY
|
+------------------+-----------------+---------+-----------------
|    1    | john     |  35 | 100233023    |     2 |  10000 |
|    2    | Linda    |  30 | 100234565    |     1 |  15000 |
|    3    | Max      |  40 | 122222344    |     3 |  22000 |
|    4    | Will     |  40 |  12323424    |     3 |  31000 |
|    5    | Michal   |  45 |  12323434    |     3 |   5000 |
+------------------+-----------------+---------+-----------------
```

DEPARTMENTS:

```
+-----------+---------------------+
| DEPT_ID | DEPT_NAME    |
+-----------+---------------------+
|     1 | Accounts     |
|     2 | HR           |
|     3 | Production   |
+-----------+---------------------+
```

2. Consider the example of employee and departments find salary above 10000.
3. SELECT * FROM EMPLOYEE

WHERE DEPT_ID =

(SELECT DEPT_ID FROM DEPARTMENTS); (output for the above query)

4. *SELECT Model FROM Product WHERE ManufacturerID IN (SELECT ManufacturerID FROM Manufacturer WHERE Manufacturer = 'Dell')* (output for the above query)
5. The agent_code of orders table must be the same agent_code of agents table and agent_name of agents table must be Alex,
   Sample table: orders

ORD_NUM	ORD_AMOUNT	ADVANCE_AMOUNT	ORD_DATE	CUST_CODE	AGENT_CODE	ORD_DESCRIPTION
200114	3500	2000	15-AUG-08	C00002		A008
200122	2500	400	16-SEP-08	C00003		A004
200118	500	100	20-JUL-08	C00023		A006
200119	4000	700	16-SEP-08	C00007		A010
200121	1500	600	23-SEP-08	C00008		A004
200130	2500	400	30-JUL-08	C00025		A011
200134	4200	1800	25-SEP-08	C00004		A005
200108	4000	600	15-FEB-08	C00008		A004
200103	1500	700	15-MAY-08	C00021		A005
200105	2500	500	18-JUL-08	C00025		A011
200109	3500	800	30-JUL-08	C00011		A010

Sample table: agents

```
AGENT_CODE | AGENT_NAME           | WORKING_AREA       | COMMISSION |
PHONE_NO        | COUNTRY |

+------------+----------------------+--------------------+------------
+-----------------+---------+
| A007       | Ramasundar           | Bangalore          |       0.15 |
077-25814763    |         |
| A003       | Alex                 | London             |       0.13 |
075-12458969    |         |
| A008       | Alford               | New York           |       0.12 |
044-25874365    |         |
| A011       | Ravi Kumar           | Bangalore          |       0.15 |
077-45625874    |         |
| A010       | Santakumar           | Chennai            |       0.14 |
007-22388644    |         |
| A012       | Lucida               | San Jose           |       0.12 |
044-52981425    |         |
| A005       | Anderson             | Brisban            |       0.13 |
045-21447739    |         |
| A001       | Subbarao             | Bangalore          |       0.14 |
077-12346674    |         |
| A002       | Mukesh               | Mumbai             |       0.11 |
029-12358964    |         |
| A006       | McDen                | London             |       0.15 |
078-22255588    |         |
| A004       | Ivan                 | Torento            |       0.15 |
008-22544166    |         |
| A009       | Benjamin             | Hampshair          |       0.11 |
008-22536178    |         |
+------------+----------------------+--------------------+------------+----------------
```

6. Using EXISTS the following query display the employee_id, manager_id, first_name and last_name of those employees who manage other employees.
7. Using NOT EXISTS the following query display the employee_id, manager_id, first_name and last_name of those employees who have no manager status.

DBMS Tutorial 7/11/19 Solutions:

1. SELECT * FROM EMPLOYEE

WHERE DEPT_ID = (SELECT DEPT_ID FROM DEPARTMENTS WHERE DEPT_NAME = "ACCOUNTS");

2. select * from employee where emp_id in

(select emp_id from employee
where salary > 10000);

3. ERROR 1242 (21000): Subquery returns more than 1 row
   or
   SELECT * FROM EMPLOYEE

WHERE DEPT_ID IN
(SELECT DEPT_ID FROM DEPARTMENTS);

4.

Model
Inspiron B120
Inspiron B130
Inspiron E1705

Correlated quries:

5. SELECT a.ord_num,a.ord_amount,a.cust_code,a.agent_code FROM orders a WHERE a.agent_code=(SELECT b.agent_code FROM agents b WHERE b.agent_name='Alex');

6. SELECT employee_id, manager_id, first_name, last_name FROM employees a WHERE EXISTS (SELECT employee_id FROM employees b WHERE b.manager_id = a.employee_id)
7. SELECT employee_id, manager_id, first_name, last_name FROM employees a WHERE NOT EXISTS (SELECT employee_id FROM employees b WHERE b.manager_id = a.employee_id);