## SQL Assessment- Employee Database

1. Create an SQL statement to list all managers and their titles.

```
1 SELECT CONCAT(e.first_name, ' ', e.last_name) AS department_manager, title
2 FROM employees e
3 Inner JOIN dept_manager dm ON dm.emp_no = e.emp_no
4 LEFT JOIN titles t ON t.emp_no = dm.emp_no;
```

2) Create a SQL statement to show the salary of all employees and their department name.

```
SELECT s.salary, d.dept_name, CONCAT(first_name, ' ', last_name) AS full_name

FROM employees e

LEFT JOIN salaries s ON e.emp_no = s.emp_no

LEFT JOIN dept_emp de ON e.emp_no = de.emp_no

LEFT JOIN departments d ON de.dept_no = d.dept_no

UNION

SELECT s.salary, d.dept_name, CONCAT(first_name, ' ', last_name) AS full_name

FROM employees e

LEFT JOIN salaries s ON e.emp_no = s.emp_no

LEFT JOIN dept_manager dm ON e.emp_no = dm.emp_no

LEFT JOIN departments d ON dm.dept_no = d.dept_no;
```

3) Create a SQL statement to show the hire date and birth date who belongs to HR department.

```
SELECT dept_name, hire_date, birth_date
FROM employees e

INNER JOIN dept_manager dm ON e.emp_no = dm.emp_no

INNER JOIN departments d ON dm.dept_no = d.dept_no

WHERE dept_name = "Human Resources"

UNION

SELECT dept_name, hire_date, birth_date
FROM employees e

INNER JOIN dept_emp de ON e.emp_no = de.emp_no

INNER JOIN departments d ON de.dept_no = d.dept_no

WHERE dept_name = "Human Resources";
```

4) Create a SQL statement to show all departments and their department's managers.

```
SELECT d.dept_name, CONCAT(first_name, ' ', last_name) AS department_manager
FROM departments AS d
LEFT JOIN dept_manager AS dm ON d.dept_no = dm.dept_no
LEFT JOIN employees AS e ON dm.emp_no = e.emp_no;
```

5) Create a SQL statement to show a list of HR's employees who were hired after 1986.

```
1 SELECT e.emp_no, e.first_name, e.last_name, e.hire_date
2 FROM employees e
3 INNER JOIN dept_emp AS de ON e.emp_no = de.emp_no
4 INNER JOIN departments AS d ON de.dept_no = d.dept_no
5 INNER JOIN dept_manager as dm on d.dept_no = dm.dept_no
 6
7 UNION
8
9 SELECT e.emp_no, e.first_name, e.last_name, e.hire_date
10 FROM employees e
11 INNER JOIN dept_emp AS de ON e.emp_no = de.emp_no
12 INNER JOIN departments AS d ON de.dept_no = d.dept_no
13 INNER JOIN dept_manager as dm on d.dept_no = dm.dept_no
14
15 WHERE d.dept_name = 'Human Resources'
16 AND e.hire_date > '1986-01-01';
```

6) Create a SQL statement to increase any employee's salary up to 2%. Assume the employee has just phoned in with his/her last name.

```
DELIMITER $$
CREATE PROCEDURE sal_inc2()
BEGIN

SELECT e.last_name, e.emp_no, s.salary 1.02* AS new_salary
FROM employee e
LEFT JOIN salaries s on e.emp_no = s.emp_no
WHERE e.last_name = '';

END $$
DELIMITER;

CALL sal_inc2('facello');
```

7) Create a SQL statement to delete employee's record who belongs to marketing department and name start with A.

```
1 CREATE TEMPORARY TABLE x (
2 SELECT d., e.
3 FROM employees e
4 LEFT JOIN dept_emp de ON de.emp_no = e.emp_no
5 LEFT JOIN dept_manager dm ON dm.emp_no = e.emp_no
6 LEFT JOIN departments d ON d.dept_no = de.dept_no OR d.dept_no = dm.dept_no
7 );
8
9 Select * From x;
10
11 DELETE FROM x
12 WHERE x.dept_name = 'Marketing' AND x.first_name LIKE 'A%';
```

8) Create a database view to list the full names of all departments' managers, and their salaries.

```
1 CREATE VIEW department_manager_salaries AS
2 SELECT CONCAT(e.first_name, ' ', e.last_name) AS full_name,
3 d.dept_name, s.salary
4 FROM dept_manager dm
5 INNER JOIN employees e ON dm.emp_no = e.emp_no
6 INNER JOIN departments d ON dm.dept_no = d.dept_no
7 INNER JOIN salaries s ON dm.emp_no = s.emp_no;
8
9 SELECT * FROM department_manager_salaries;
```

9) Create a SQL statement to a database view to list all departments and their department's managers, who were hired between 1980 and 1990.

```
1   CREATE VIEW manager8090 AS
2   SELECT d.dept_name, CONCAT(e.first_name, ' ', e.last_name) AS
3   department_manager, YEAR(e.hire_date) AS year_hired
4   FROM dept_manager dm
5   INNER JOIN employees e ON dm.emp_no = e.emp_no
6   INNER JOIN departments d ON dm.dept_no = d.dept_no
7   WHERE YEAR(e.hire_date) BETWEEN '1980' AND '1990';
8
9   SELECT * FROM manager8090;
```

10) Create a SQL statement to to increase salaries of all department's managers up to 10% who are working since 1990.

```
1   CREATE TEMPORARY TABLE managersincrease(
2
3   SELECT CONCAT(e.first_name, ' ', e.last_name) AS name, d.dept_name, e.hire_date as hired, s.salary * 1.1 AS new_4
FROM employees e
5   LEFT JOIN dept_manager dm on dm.emp_no = e.emp_no
6   LEFT JOIN departments d on d.dept_no = dm.dept_no
7   LEFT JOIN salaries s on s.emp_no = e.emp_no
8   Where year(hire_date)>=1990);
9
10   SELECT * from managersincrease;
```