Practice DQL statement

Write SQL statement for the following

**Q 1 . To find all managers with salary >1500**

**Ans –**

mysql> select\*

-> from emp

-> where job='manager' and sal>1500;

+-------+-------+---------+------+------------+---------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+---------+------+------------+---------+------+--------+

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

+-------+-------+---------+------+------------+---------+------+--------+

3 rows in set (0.00 sec)

**Q2 .list all employees with sal >1200 and < 2000 .**

**Ans –**

mysql> select\*

-> from emp

-> where sal between 1201 and 1999;

+-------+--------+----------+------+------------+---------+---------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+----------+------+------------+---------+---------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 |

| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 | 30 |

| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 |

+-------+--------+----------+------+------------+---------+---------+--------+

5 rows in set (0.00 sec)

**Q3 - list all employees with sal is 1600 or sal is 800 or sal is 1900**

**Ans –**

mysql> select\*

-> from emp

-> where sal=1600 or sal=800 or sal=1900;

+-------+-------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+----------+------+------------+---------+--------+--------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 |

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

+-------+-------+----------+------+------------+---------+--------+--------+

2 rows in set (0.00 sec)

**Q4 - list all employees with R at second last position in name**

**Ans –**

mysql> select\*

-> from emp

-> where ename regexp '.\*r.$';

+-------+-------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+----------+------+------------+---------+--------+--------+

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 |

+-------+-------+----------+------+------------+---------+--------+--------+

3 rows in set (0.00 sec)

**Q5 - List all employees with name starts with A and ends with N**

**Ans –** mysql> select\*

-> from emp

-> where ename regexp '^a.\*n$';

+-------+-------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+----------+------+------------+---------+--------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

+-------+-------+----------+------+------------+---------+--------+--------+

1 row in set (0.00 sec)

Q2. Solve following

Q1. list all employees with salary > 1250 and dept no=30

Ans - mysql> select\*

-> from emp

-> where sal>1250 and deptno=30;

+-------+--------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+----------+------+------------+---------+--------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 |

+-------+--------+----------+------+------------+---------+--------+--------+

3 rows in set (0.00 sec)

Q2. list all employees with salary >=1250 and <= 3000

Ans –

mysql> select\*

-> from emp

-> where sal between 1250 and 3000;

+-------+--------+----------+------+------------+---------+---------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+----------+------+------------+---------+---------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 |

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 | 30 |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |

| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 |

| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 |

+-------+--------+----------+------+------------+---------+---------+--------+

10 rows in set (0.00 sec)

Q3. list all employees with salary >1250 and < 3000

Ans –

mysql> select\*

-> from emp

-> where sal between 1251 and 2999;

+-------+--------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+----------+------+------------+---------+--------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 |

+-------+--------+----------+------+------------+---------+--------+--------+

6 rows in set (0.00 sec)

Q4. list all employees with salary either equal to 3000 or 1250 or 2500

Ans –

mysql> select\*

-> from emp

-> where sal=1250 or sal = 3000 or sal =2500;

+-------+--------+----------+------+------------+---------+---------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+----------+------+------------+---------+---------+--------+

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 |

| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 | 30 |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |

| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 |

+-------+--------+----------+------+------------+---------+---------+--------+

4 rows in set (0.00 sec)

Q5. list all employee with name=SMITH

Ans –

mysql> select\*

-> from emp

-> where ename='smith';

+-------+-------+-------+------+------------+--------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+-------+------+------------+--------+------+--------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 |

+-------+-------+-------+------+------------+--------+------+--------+

1 row in set (0.00 sec)

Q6. list all employees with name starting with S

Ans –

mysql> select \*

-> from emp

-> where ename regexp '^s';

+-------+-------+---------+------+------------+---------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+---------+------+------------+---------+------+--------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |

+-------+-------+---------+------+------------+---------+------+--------+

2 rows in set (0.00 sec)

Q7. list all employees with name ending with S

Ans –

mysql> select \*

-> from emp

-> where ename regexp '.\*s$';

+-------+-------+---------+------+------------+---------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+---------+------+------------+---------+------+--------+

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 |

| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950.00 | NULL | 30 |

+-------+-------+---------+------+------------+---------+------+--------+

3 rows in set (0.00 sec)

Q8. list all employees with name contains I at 2nd position

Ans –

mysql> select\*

-> from emp

-> where ename regexp '^.i.\*';

+-------+--------+-----------+------+------------+---------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+-----------+------+------------+---------+------+--------+

| 7839 | KING | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10 |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 |

+-------+--------+-----------+------+------------+---------+------+--------+

2 rows in set (0.00 sec)

Q9. list all employees with name starts with A ends with N and somewhere in between L is there

Ans –

mysql> select\*

-> from emp

-> where ename regexp '^al.\*n$';

+-------+-------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+----------+------+------------+---------+--------+--------+

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

+-------+-------+----------+------+------------+---------+--------+--------+

1 row in set (0.00 sec)

Q10. list all employees with name starts with A and B at 3 rd position and P at second last position

Ans –

mysql> select\*

-> from emp

-> where ename regexp '^a.b.\*p.$';

Empty set (0.00 sec)

Q11. List all employees with name starts with either A or starts with S or starts with W

Ans –

mysql>

mysql> select\*

-> from emp

-> where ename regexp '^[asw]';

+-------+-------+----------+------+------------+---------+--------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+-------+----------+------+------------+---------+--------+--------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 |

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 |

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |

| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 |

+-------+-------+----------+------+------------+---------+--------+--------+

5 rows in set (0.00 sec)

practice Aggregate functions

Q12. find max sal and min sal for each job

Ans –

mysql> select max(sal) , min(sal)

-> from emp

-> group by job;

+----------+----------+

| max(sal) | min(sal) |

+----------+----------+

| 1300.00 | 800.00 |

| 1600.00 | 1250.00 |

| 2975.00 | 2450.00 |

| 3000.00 | 3000.00 |

| 5000.00 | 5000.00 |

+----------+----------+

5 rows in set (0.00 sec)

Q13. find how many employess have not received commission   
Ans –

mysql> select\*

-> from emp

-> where comm is null;

+-------+--------+-----------+------+------------+---------+------+--------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |

+-------+--------+-----------+------+------------+---------+------+--------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 |

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |

| 7839 | KING | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10 |

| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 |

| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950.00 | NULL | 30 |

| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 |

+-------+--------+-----------+------+------------+---------+------+--------+

10 rows in set (0.00 sec)

Q14. find sum of sal of all employees working in dept no 10

Ans –

mysql> select sum(sal) sum\_of\_salary , deptno

-> from emp

-> where deptno = 10

-> ;

+---------------+--------+

| sum\_of\_salary | deptno |

+---------------+--------+

| 8750.00 | 10 |

+---------------+--------+

1 row in set (0.00 sec)

Q15. find maximum salary,average sal for each job in every department

Ans –

mysql> select max(sal) Maximum\_salary , ceil(avg(sal)) Average\_salary , job, deptno

-> from emp

-> group by job , deptno;

+----------------+----------------+-----------+--------+

| Maximum\_salary | Average\_salary | job | deptno |

+----------------+----------------+-----------+--------+

| 1100.00 | 950 | CLERK | 20 |

| 1600.00 | 1400 | SALESMAN | 30 |

| 2975.00 | 2975 | MANAGER | 20 |

| 2850.00 | 2850 | MANAGER | 30 |

| 2450.00 | 2450 | MANAGER | 10 |

| 3000.00 | 3000 | ANALYST | 20 |

| 5000.00 | 5000 | PRESIDENT | 10 |

| 950.00 | 950 | CLERK | 30 |

| 1300.00 | 1300 | CLERK | 10 |

+----------------+----------------+-----------+--------+

9 rows in set (0.00 sec)

Q 16. find max salary for every department if deptno is > 15 and arrange data in deptno order.

Ans –

mysql> select max(sal) Maximum\_sal , deptno

-> from emp

-> where deptno>15

-> group by deptno;

+-------------+--------+

| Maximum\_sal | deptno |

+-------------+--------+

| 3000.00 | 20 |

| 2850.00 | 30 |

+-------------+--------+

2 rows in set (0.00 sec)

Q 17. find sum salary for every department if sum is > 3000

Ans –

mysql> select sum(sal) Total\_sal, deptno

-> from emp

-> group by deptno

-> having sum(sal)>3000;

+-----------+--------+

| Total\_sal | deptno |

+-----------+--------+

| 10875.00 | 20 |

| 9400.00 | 30 |

| 8750.00 | 10 |

+-----------+--------+

3 rows in set (0.00 sec)

Q 18. list all department which has minimum 5 employees.

Ans –

mysql> select\* , count(\*)

-> from emp

-> group by deptno

-> having count(\*)>=5;

+-------+-------+----------+------+------------+---------+--------+--------+----------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO | count(\*) |

+-------+-------+----------+------+------------+---------+--------+--------+----------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 | 5 |

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 | 6 |

+-------+-------+----------+------+------------+---------+--------+--------+----------+

2 rows in set (0.00 sec)

Q19. count how many employees earn salary more than 2000 in each job

Ans –

mysql> select count(\*)

-> from emp

-> where sal>2000;

+----------+

| count(\*) |

+----------+

| 6 |

+----------+

1 row in set (0.00 sec)

Q 20. list all enames and jobs in small case letter

Ans –

mysql> select\* , lower(job) , lower(ename)

-> from emp;

+-------+--------+-----------+------+------------+---------+---------+--------+------------+--------------+

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO | lower(job) | lower(ename) |

+-------+--------+-----------+------+------------+---------+---------+--------+------------+--------------+

| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 | clerk | smith |

| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 | salesman | allen |

| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 | salesman | ward |

| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 | manager | jones |

| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 | 30 | salesman | martin |

| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 | manager | blake |

| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 | manager | clark |

| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 | analyst | scott |

| 7839 | KING | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10 | president | king |

| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 | salesman | turner |

| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 | clerk | adams |

| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950.00 | NULL | 30 | clerk | james |

| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 | analyst | ford |

| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 | clerk | miller |

+-------+--------+-----------+------+------------+---------+---------+--------+------------+--------------+

14 rows in set (0.01 sec)