**MySQL Assignment -3 (DQL)**

**MySQL Assignment -3 (Basic Select)**

1. **Write a query to display the names (first\_name, last\_name) using alias name “First Name", "Last Name.**

**Ans:**

mysql> select first\_name "First Name",last\_name "Last Name"

-> from employees;

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

| First Name | Last Name |

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

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

| Nancy | GreeenBerg |

| Daniel | Faviet |

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

10 rows in set (0.00 sec)

1. **Write a query to get unique department ID from employee table.**

**Ans:**

mysql> select distinct department\_id

-> from employees;

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

| department\_id |

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

| 10 |

| 30 |

| 60 |

| 80 |

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

4 rows in set (0.00 sec)

mysql>

1. **Write a query to get all employee details from the employee table order by first name, descending**

**Ans**: mysql> select\*

-> from employees

-> order by first\_name desc;

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

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

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

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 108 | Nancy | GreeenBerg | NGREENBE | 515.124.4569 | 1987-06-25 | SA\_MAN | 12000.00 | 0.00 | 145 | 80 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 114 | 30 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | SA\_MAN | 9000.00 | 0.00 | 145 | 80 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 103 | 60 |

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

10 rows in set (0.00 sec)

1. **Write a query to get the names (first\_name, last\_name), salary, PF of all the employees (PF is calculated as 15% of salary).**

**Ans:**

mysql> select first\_name,last\_name,salary,salary\*.15 PF

-> from employees;

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

| first\_name | last\_name | salary | PF |

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

| Steven | King | 24000.00 | 3600.0000 |

| Neena | Kochhar | 17000.00 | 2550.0000 |

| Lex | De Haan | 17000.00 | 2550.0000 |

| Alexander | Hunold | 9000.00 | 1350.0000 |

| Bruce | Ernst | 6000.00 | 900.0000 |

| David | Austin | 4800.00 | 720.0000 |

| Valli | Pataballa | 4800.00 | 720.0000 |

| Diana | Lorentz | 4200.00 | 630.0000 |

| Nancy | GreeenBerg | 12000.00 | 1800.0000 |

| Daniel | Faviet | 9000.00 | 1350.0000 |

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

10 rows in set (0.04 sec)

1. **Write a query to get the employee ID, names (first\_name, last\_name), salary in ascending order of salary.**

**Ans:**

mysql> select employee\_id,first\_name,last\_name,salary

-> from employees

-> order by salary;

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

| employee\_id | first\_name | last\_name | salary |

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

| 107 | Diana | Lorentz | 4200.00 |

| 105 | David | Austin | 4800.00 |

| 106 | Valli | Pataballa | 4800.00 |

| 104 | Bruce | Ernst | 6000.00 |

| 103 | Alexander | Hunold | 9000.00 |

| 109 | Daniel | Faviet | 9000.00 |

| 108 | Nancy | GreeenBerg | 12000.00 |

| 101 | Neena | Kochhar | 17000.00 |

| 102 | Lex | De Haan | 17000.00 |

| 100 | Steven | King | 24000.00 |

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

10 rows in set (0.00 sec)

1. **Write a query to get the total salaries payable to employees.**

**Ans:**

mysql> select sum(salary)

-> from employees;

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

| sum(salary) |

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

| 107800.00 |

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

1 row in set (0.04 sec)

mysql>

1. **Write a query to get the maximum and minimum salary from employees table.**

**Ans:**

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

-> from employees;

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

| max(salary) | min(salary) |

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

| 24000.00 | 4200.00 |

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

1 row in set (0.00 sec)

1. **Write a query to get the average salary and number of employees in the employees table.**

**Ans:**

mysql> select avg(salary),count(\*)

-> from employees;

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

| avg(salary) | count(\*) |

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

| 10780.000000 | 10 |

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

1 row in set (0.00 sec)

1. **Write a query to get the number of employees working with the company.**

**Ans:**

mysql> select count(\*)

-> from employees;

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

| count(\*) |

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

| 10 |

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

1 row in set (0.11 sec)

1. **Write a query to get the number of jobs available in the employees table**

**Ans:**

mysql> select count(distinct job\_id)

-> from employees;

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

| count(distinct job\_id) |

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

| 4 |

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

1 row in set (0.08 sec)

1. **Write a query to select first 10 records from a table.**

**Ans:**

mysql> select \* from employees limit 10;

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

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

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

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 103 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 114 | 30 |

| 108 | Nancy | GreeenBerg | NGREENBE | 515.124.4569 | 1987-06-25 | SA\_MAN | 12000.00 | 0.00 | 145 | 80 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | SA\_MAN | 9000.00 | 0.00 | 145 | 80 |

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

10 rows in set (0.00 sec)

1. **Write a query to display the name (first\_name, last\_name) and salary for all employees whose salary is not in the range $10,000 through $15,000**

**Ans:**

mysql> select first\_name,last\_name,salary

-> from employees

-> where salary not between 10000 and 15000;

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

| first\_name | last\_name | salary |

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

| Steven | King | 24000.00 |

| Neena | Kochhar | 17000.00 |

| Lex | De Haan | 17000.00 |

| Alexander | Hunold | 9000.00 |

| Bruce | Ernst | 6000.00 |

| David | Austin | 4800.00 |

| Valli | Pataballa | 4800.00 |

| Diana | Lorentz | 4200.00 |

| Daniel | Faviet | 9000.00 |

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

9 rows in set (0.00 sec)

1. **Write a query to display the name (first\_name, last\_name) and department ID of all employees in departments 30 or 100 in ascending order.**

**Ans:**

mysql> select first\_name,last\_name,department\_id

-> from employees

-> where department\_id IN (30,100)

-> order by department\_id asc;

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

| first\_name | last\_name | department\_id |

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

| Diana | Lorentz | 30 |

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

1 row in set (0.03 sec)

1. **Write a query to display the name (first\_name, last\_name) and salary for all employees whose salary is not in the range $10,000 through $15,000 and are in department 30 or 100.**

**Ans:**

mysql> select first\_name,last\_name,salary,department\_id

-> from employees

-> where salary not between 10000 and 15000

-> and department\_id in (30,100);

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

| first\_name | last\_name | salary | department\_id |

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

| Diana | Lorentz | 4200.00 | 30 |

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

1 row in set (0.00 sec)

1. **Write a query to display the name (first\_name, last\_name) and hire date for all employees who were hired in 1987.**

**Ans:**

mysql> select first\_name,last\_name,hire\_date

-> from employees

-> where year(hire\_date)like '1987%';

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

| first\_name | last\_name | hire\_date |

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

| Steven | King | 1987-06-17 |

| Neena | Kochhar | 1987-06-18 |

| Lex | De Haan | 1987-06-19 |

| Alexander | Hunold | 1987-06-20 |

| Bruce | Ernst | 1987-06-21 |

| David | Austin | 1987-06-22 |

| Valli | Pataballa | 1987-06-23 |

| Diana | Lorentz | 1987-06-24 |

| Nancy | GreeenBerg | 1987-06-25 |

| Daniel | Faviet | 1987-06-26 |

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

10 rows in set (0.04 sec)

1. **Write a query to display the first\_name of all employees who have both "b" and "c" in their first name**

**Ans:**

mysql> select first\_name

-> from employees

-> where first\_name like '%b%'

-> and first\_name like '%c%';

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

| first\_name |

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

| Bruce |

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

1 row in set (0.00 sec)

1. **Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to $4,500, $10,000, or $15,000.**

**Ans:**

mysql> select last\_name,job\_id,salary

-> from employees

-> where job\_id IN ('IT\_PROG','SH\_CLERK')

-> and salary NOT IN(4500,10000,15000);

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

| last\_name | job\_id | salary |

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

| Hunold | IT\_PROG | 9000.00 |

| Ernst | IT\_PROG | 6000.00 |

| Austin | IT\_PROG | 4800.00 |

| Pataballa | IT\_PROG | 4800.00 |

| Lorentz | IT\_PROG | 4200.00 |

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

5 rows in set (0.00 sec)

1. **Write a query to display the last name of employees whose names have exactly 6 characters.**

**Ans:**

mysql> select last\_name from employees where last\_name like '\_\_\_\_\_\_';

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

| last\_name |

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

| Hunold |

| Austin |

| Faviet |

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

3 rows in set (0.00 sec)

1. **Write a query to display the last name of employees having 'e' as the third character.**

**Ans:**

mysql> select last\_name from employees where last\_name like'\_\_e%';

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

| last\_name |

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

| GreeenBerg |

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

1 row in set (0.00 sec)

1. **Write a query to display the jobs/designations available in the employees table.**

**Ans:**

mysql> select distinct job\_id from employees;

+---------+

| job\_id |

+---------+

| AD\_PRES |

| AD\_VP |

| IT\_PROG |

| SA\_MAN |

+---------+

4 rows in set (0.00 sec)

1. **Write a query to select all record from employees where last name in 'BLAKE', 'SCOTT', 'KING' and 'FORD'**

**Ans:**

mysql> select \*

-> from employees

-> where last\_name IN('BLAKE','SCOTT','KING','FORD');

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

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

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

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 200 | 10 |

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

1 row in set (0.00 sec)