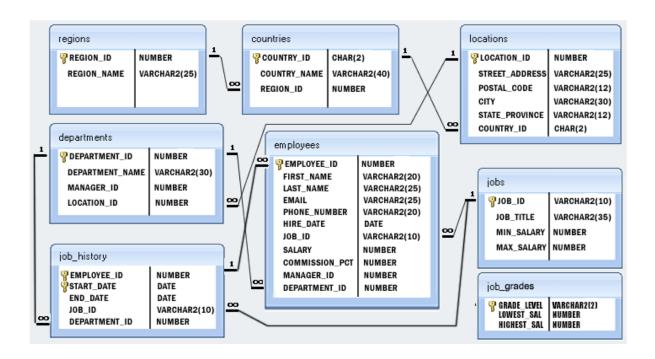
## MYSQL HR DATABASE QUERIES:



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

```
SELECT FIRST_NAME as "FIRST NAME",LAST_NAME as "LAST NAME" from employees;
```

2. Write a guery to get unique department ID from employee table.

```
SELECT DISTINCT (DEPARTMENT ID) from employees;
```

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

```
SELECT * from employees ORDER BY FIRST NAME DESC;
```

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

```
SELECT FIRST NAME, LAST NAME, SALARY, SALARY * 0.15 AS PF FROM employees;
```

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

SELECT EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, SALARY FROM employees ORDER BY SALA
RY ASC;

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

```
SELECT SUM(SALARY) from employees;
```

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

```
SELECT MIN (SALARY) AS "MINIMUM SALARY", MAX (SALARY) AS "MAXIMUM SALARY" from employees;
```

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

```
SELECT AVG (SALARY), COUNT (EMPLOYEE_ID) AS "NUMBER OF
EMPLOYEES" from employees;
```

9. Write a guery to get the number of jobs available in the employees table.

```
SELECT COUNT (DISTINCT JOB ID) FROM employees;
```

**10.** Write a query get all first name from employees table in upper case.

```
SELECT UPPER(FIRST NAME) from employees;
```

**11.** Write a query to get the first 3 characters of first name from employees table.

```
SELECT LEFT (FIRST NAME, 3) from employees;
```

**12.** Write a query to calculate 171\*214+625.

```
SELECT 171*214+625 AS "RESULT";
```

**13.** Write a query to get the names (for example Ellen Abel, Sundar Ande etc.) of all the employees from employees table.

```
SELECT CONCAT(FIRST_NAME, " ",LAST_NAME) AS "EMPLOYEE NAME" from employees;
```

**14.** Write a query to get first name from employees table after removing white spaces from both side.

```
SELECT TRIM(FIRST NAME) from employees;
```

**15.** Write a query to get the length of the employee names (first\_name, last\_name) from employees table.

```
SELECT FIRST_NAME, LAST_NAME, LENGTH(FIRST_NAME) + LENGTH(LAST_NAME) AS "FULL
NAME LENGTH" from employees;
```

**16.** Write a query to check if the first\_name fields of the employees table contains numbers.

```
SELECT FIRST NAME FROM employees WHERE FIRST NAME REGEXP '[0-9]';
```

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

```
SELECT * FROM `employees` LIMIT 10;
```

**18.** Write a query to get monthly salary (round 2 decimal places) of each and every employee.

```
SELECT FIRST_NAME, LAST_NAME, ROUND (SALARY/12,2) AS "SALARY PER MONTH ROUNDED
2" from employees;
```

**19.** 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.

```
SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE SALARY NOT BETWEEN 10000 AND 15000;
```

**20.** 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.

```
SELECT DEPARTMENT_ID, CONCAT(FIRST_NAME, " ", LAST_NAME) AS "EMPLOYEE

NAME" FROM employees WHERE DEPARTMENT_ID = 30 OR DEPARTMENT_ID = 100 ORDER

BY DEPARTMENT ID ASC;
```

## OR

SELECT FIRST\_NAME, LAST\_NAME, DEPARTMENT\_ID FROM employees WHERE DEPARTMENT ID IN (30, 100) ORDER BY DEPARTMENT ID ASC;

**21.** 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.

SELECT FIRST\_NAME, LAST\_NAME, DEPARTMENT\_ID FROM employees WHERE DEPARTMENT ID IN (30, 100) AND SALARY NOT BETWEEN 10000 AND 15000;

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

```
SELECT FIRST_NAME, LAST_NAME, HIRE_DATE FROM employees WHERE YEAR (HIRE_DATE
) = 1987;
```

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

```
SELECT FIRST_NAME FROM employees WHERE FIRST_NAME LIKE '%b%' AND FIRST_NAME LIKE '%c%';
```

**24.** 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.

```
SELECT LAST_NAME, JOB_ID, SALARY FROM employees WHERE JOB_ID IN ('IT_PROG','S
H CLERK') AND SALARY NOT IN (4500,10000,15000);
```

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

```
SELECT LAST_NAME FROM employees WHERE LENGTH(LAST_NAME) = 6;
OR
```

```
SELECT LAST_NAME FROM employees WHERE LAST_NAME LIKE '____';
```

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

```
SELECT LAST NAME FROM employees WHERE LAST NAME LIKE '% e%';
```

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

```
SELECT DISTINCT JOB ID FROM employees;
```

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

```
\frac{\texttt{SELECT}}{\texttt{'})} * \texttt{FROM employees WHERE LAST\_NAME } \underline{\texttt{IN}} \; (\texttt{'BLAKE', 'SCOTT', 'KING', 'FORD'});
```

**29.** Write a query to list the number of jobs available in the employees table.

```
SELECT COUNT(DISTINCT(JOB ID)) FROM employees;
```

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

```
SELECT SUM(SALARY) FROM employees;
```

**31.** Write a query to get the minimum salary from employees table.

```
<u>SELECT</u> <u>MIN</u>(SALARY) FROM employees;
```

**32.** Write a query to get the maximum salary of an employee working as a Programmer.

```
SELECT MAX(SALARY) FROM employees WHERE JOB_ID = "IT_PROG";
```

**33.** Write a query to get the average salary and number of employees working the department 90.

```
SELECT AVG (SALARY), COUNT (EMPLOYEE_ID) FROM employees WHERE DEPARTMENT_ID =
90;
```

**34.** Write a query to get the highest, lowest, sum, and average salary of all employees.

```
SELECT MIN(SALARY), MAX(SALARY), AVG(SALARY), SUM(SALARY) FROM employees;
```

**35.** Write a query to get the number of employees with the same job.

```
SELECT JOB ID, COUNT (EMPLOYEE ID) FROM employees GROUP BY JOB ID;
```

**36.** Write a guery to get the difference between the highest and lowest salaries

```
<u>SELECT</u> (<u>MAX</u>(SALARY) - <u>MIN</u>(SALARY)) AS "SALARY DIFFERENCE" FROM employees;
```

37. Write a query to find the manager ID and the salary of the lowest-paid employee for that manager.

SELECT MANAGER\_ID, MIN(SALARY) FROM employees WHERE MANAGER\_ID IS NOT NULL GROUP BY MANAGER ID ORDER BY MIN(SALARY) ASC;

**38.** Write a query to get the department ID and the total salary payable in each department.

SELECT DEPARTMENT\_ID, SUM (SALARY) FROM employees WHERE DEPARTMENT\_ID IS NOT NULL GROUP BY DEPARTMENT ID;

**39.** Write a query to get the average salary for each job ID excluding programmer.

SELECT JOB\_ID, AVG(SALARY) FROM employees WHERE JOB\_ID IS NOT NULL AND JOB\_I
D <> "IT\_PROG" GROUP BY JOB\_ID;

**40.** Write a query to get the total salary, maximum, minimum, average salary of employees (job ID wise), for department ID 90 only.

<u>SELECT</u> JOB\_ID, <u>SUM</u>(SALARY), <u>MAX</u>(SALARY), <u>MIN</u>(SALARY), <u>AVG</u>(SALARY) FROM employee s WHERE DEPARTMENT\_ID = 90 GROUP BY JOB\_ID;

**41.** Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to \$4000.

 $\frac{\text{SELECT JOB\_ID,} \underline{\text{MAX}} \text{ (SALARY)}}{\text{>= 4000;}} \text{ FROM employees GROUP BY JOB\_ID HAVING } \underline{\underline{\text{MAX}}} \text{ (SALARY)}$ 

**42.** Write a query to get the average salary for all departments employing more than 10 employees.

 $\frac{\texttt{SELECT}}{\texttt{DEPARTMENT}} \underbrace{\texttt{COUNT}}_{\texttt{(EMPLOYEE\_ID)}} \underbrace{\texttt{DEPARTMENT\_ID}}_{\texttt{AVG}} \underbrace{\texttt{(SALARY)}}_{\texttt{FROM}} \underbrace{\texttt{Employees}}_{\texttt{GROUP}} \underbrace{\texttt{BY}}_{\texttt{DEPARTMENT}}$ 

**43.** Write a query to find the name (first\_name, last\_name) and the salary of the employees who have a higher salary than the employee whose last name='Bull'.

SELECT FIRST\_NAME, LAST\_NAME, SALARY FROM employees WHERE SALARY > (SELECT SA
LARY FROM employees WHERE LAST\_NAME = "BULL");

**44.** Write a query to find the name (first\_name, last\_name) of all employees who works in the IT department.

```
SELECT FIRST_NAME, LAST_NAME FROM employees WHERE DEPARTMENT_ID = (SELECT DE
PARTMENT_ID FROM departments WHERE DEPARTMENT_NAME = "IT");
```

45. Write a query to find the name (first\_name, last\_name) of the employees who have a manager and worked in a USA based department.

```
SELECT first_name, last_name FROM employees WHERE manager_id in (select manager_id FROM employees WHERE department_id IN (SELECT department_id FROM departments WHERE location_id IN (SELECT location_id from locations where country_id='US')));
```

**46.** Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is greater than the average salary.

```
SELECT FIRST_NAME,LAST_NAME,SALARY FROM employees WHERE SALARY > (SELECT AV
G(SALARY) FROM employees);
```

**47.** Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is equal to the minimum salary for their job grade.

```
<u>SELECT</u> FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE employees.SALARY = (SELECT MIN SALARY FROM jobs WHERE employees.JOB ID = jobs.JOB ID);
```

**48.** Write a query to find the name (first\_name, last\_name), and salary of the employees who earns more than the average salary and works in any of the IT departments.

```
SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE DEPARTMENT_ID IN (SELECT DEPARTMENT_ID FROM departments WHERE DEPARTMENT_NAME LIKE '%IT%') AND SALARY > (SELECT AVG(SALARY) FROM employees);
```

**49.** Write a query to find the name (first\_name, last\_name), and salary of the employees who earns more than the earning of Mr. Bell.

```
SELECT FIRST_NAME, LAST_NAME, SALARY FROM employees WHERE salary > (SELECT salary FROM employees WHERE LAST NAME="Bell") ORDER BY FIRST NAME;
```

50. Write a query to find the name (first\_name, last\_name), and salary of the employees who earn the same salary as the minimum salary for all departments.

## OR

SELECT \* FROM employees WHERE SALARY = (SELECT MIN(SALARY) FROM employees);

51. Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is greater than the average salary of all departments.

 $\frac{\mathtt{SELECT}}{\mathtt{s}} \ \ \mathtt{FROM} \ \ \mathtt{employees} \ \ \mathtt{WHERE} \ \ \mathtt{SALARY} \ \ \mathtt{ALL} \ (\underline{\mathtt{SELECT}} \ \ \underline{\mathtt{AVG}} \ (\mathtt{SALARY}) \ \ \mathtt{FROM} \ \ \mathtt{employee}$ 

52. Write a query to find the name (first\_name, last\_name) and salary of the employees who earn a salary that is higher than the salary of all the Shipping Clerk (JOB\_ID = 'SH\_CLERK'). Sort the results of the salary of the lowest to highest.

SELECT FIRST\_NAME, LAST\_NAME, SALARY FROM employees WHERE SALARY > ALL(SELECT
SALARY FROM employees WHERE JOB ID = "SH CLERK") ORDER BY SALARY ASC;

53. Write a query to display the employee ID, first name, last name, and department names of all employees.

SELECT EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, (SELECT DEPARTMENT\_NAME FROM depart ments D WHERE D.DEPARTMENT\_ID = E.DEPARTMENT\_ID) DEPARTMENT FROM employees E ORDER BY DEPARTMENT;

54. Write a query to display the employee ID, first name, last name, salary of all employees whose salary is above average for their departments.

SELECT EMPLOYEE\_ID,FIRST\_NAME,LAST\_NAME,SALARY FROM employees A WHERE SALAR
Y > (SELECT AVG (SALARY) FROM employees WHERE DEPARTMENT\_ID = A.DEPARTMENT\_ID);

55. Write a query to fetch even numbered records from employees table.

SELECT EMPLOYEE ID FROM employees WHERE EMPLOYEE ID % 2 = 0;

56. Write a query to find the 5th maximum salary in the employees table.

SELECT SALARY FROM employees ORDER BY SALARY DESC LIMIT 5;

57. Write a query to select last 10 records from a table.

SELECT \* FROM (SELECT \* FROM employees ORDER BY EMPLOYEE\_ID DESC LIMIT 10)
RESULT ORDER BY EMPLOYEE ID ASC;

58. Write a query to list the department ID and name of all the departments where no employee is working.

SELECT \* FROM departments WHERE DEPARTMENT\_ID NOT IN (SELECT DEPARTMENT\_ID
FROM employees);

59. Write a query to get 3 maximum salaries.

SELECT DISTINCT(SALARY) FROM employees ORDER BY SALARY DESC LIMIT 3;

60. Write a query to get 3 minimum salaries.

SELECT DISTINCT(SALARY) FROM employees ORDER BY SALARY ASC LIMIT 3;

61. Write a query to find the addresses (location\_id, street\_address, city, state\_province, country\_name) of all the departments.

SELECT location\_id, street\_address, city, state\_province, country\_name FROM loc
ations NATURAL JOIN countries;

62. Write a query to find the name (first\_name, last name), department ID and name of all the employees.

SELECT e.FIRST\_NAME, e.LAST\_NAME, e.DEPARTMENT\_ID, d.DEPARTMENT\_NAME FROM empl
oyees e INNER JOIN departments d ON e.DEPARTMENT\_ID = d.DEPARTMENT\_ID;

63. Write a query to find the name (first\_name, last\_name), job, department ID and name of the employees who works in London.

SELECT e.FIRST\_NAME, e.LAST\_NAME, e.JOB\_ID, e.DEPARTMENT\_ID, d.DEPARTMENT\_NAME FROM employees e INNER JOIN departments d ON (e.DEPARTMENT\_ID = d.DEPARTMEN T\_ID) INNER JOIN locations 1 ON (d.LOCATION\_ID = 1.LOCATION\_ID) WHERE LOWER (1.CITY) = "London";

64. Write a query to find the name (first\_name, last\_name) and hire date of the employees who was hired after 'Jones'.

```
SELECT e.FIRST_NAME, e.LAST_NAME, e.HIRE_DATE FROM employees e JOIN employe
es f ON (f.last_name = 'Jones') WHERE f.hire_date < e.hire_date;</pre>
```

65. Write a query to get the department name and number of employees in the department.

SELECT DEPARTMENT\_NAME, COUNT (EMPLOYEE\_ID) FROM departments INNER JOIN employees ON employees.DEPARTMENT\_ID = departments.DEPARTMENT\_ID GROUP BY departments.DEPARTMENT\_ID, DEPARTMENT\_NAME ORDER BY DEPARTMENT\_NAME;

66. Write a query to find the employee ID, job title, number of days between ending date and starting date for all jobs in department 90.

```
SELECT EMPLOYEE_ID, JOB_TITLE, END_DATE - START_DATE FROM job_history NATURAL
JOIN jobs WHERE DEPARTMENT ID = 90;
```

67. Write a query to display the department ID and name and first name of manager.

SELECT departments.DEPARTMENT\_ID, departments.DEPARTMENT\_NAME, departments.MA
NAGER\_ID, employees.FIRST\_NAME FROM departments INNER JOIN employees ON depa
rtments.MANAGER ID = employees.EMPLOYEE ID;

68 Write a query to display the department name, manager name, and city.

SELECT departments.DEPARTMENT\_NAME, employees.FIRST\_NAME, locations.CITY FROM
departments JOIN employees ON (departments.MANAGER\_ID = employees.EMPLOYEE
ID) JOIN locations USING (LOCATION ID);

69. Write a query to display the job title and average salary of employees.

```
SELECT jobs.JOB_TITLE, AVG (employees.SALARY) FROM employees JOIN jobs ON (jobs.JOB_ID = employees.JOB_ID) GROUP BY JOB_TITLE;
```

70. Write a query to display job title, employee name, and the difference between salary of the employee and minimum salary for the job.

```
SELECT jobs.JOB_TITLE, employees.FIRST_NAME, employees.LAST_NAME, jobs.MAX_SAL
ARY - jobs.MIN_SALARY AS "DIFFERENCE IN
SALARY" FROM employees INNER JOIN jobs ON (jobs.JOB ID = employees.JOB ID);
```

71. Write a query to display the job history that were done by any employee who is currently drawing more than 10000 of salary.

```
SELECT * FROM job_history JOIN employees ON (job_history.EMPLOYEE_ID = employees.EMPLOYEE_ID) WHERE employees.SALARY > 10000;
```

72. Write a query to display department name, name (first\_name, last\_name), hire date, salary of the manager for all managers whose experience is more than 15 years.

```
SELECT departments.DEPARTMENT_NAME, employees.FIRST_NAME, employees.LAST_NAME, employees.HIRE_DATE, employees.SALARY, (DATEDIFF(now(), employees.HIRE_DATE)) /365 "EXPERIENCE" FROM departments INNER JOIN employees ON (departments.MAN AGER_ID = employees.EMPLOYEE_ID) WHERE (DATEDIFF(now(), employees.HIRE_DATE)) /365 > 15;
```