

SQL ASSIGNMENT_2

Dataset: Employee Information

You have been given a dataset containing information about employees in a company. The dataset includes the following columns:

- employee_id (integer): Unique identifier for each employee.
- first_name (string): First name of the employee.
- last_name (string): Last name of the employee.
- department (string): The department in which the employee works.
- hire_date (date): The date on which the employee was hired.
- salary (integer): The salary of the employee.

Table Structure:

Create a table named employees with the following structure:

```
CREATE OR REPLACE TABLE EMPLOYEES
(
  EMPLOYEE_ID INT PRIMARY KEY,
  FIRST_NAME VARCHAR(50),
  LAST_NAME VARCHAR(50),
  DEPARTMENT VARCHAR(50),
  HIRE_DATE DATE,
  SALARY INT
);
```

```
1  -- CREATING NEW DATABASE
2
3  CREATE DATABASE EMP_DATABASE;
4  USE EMP_DATABASE;
5
6  -- CREATING TABLE
7
8  CREATE OR REPLACE TABLE EMPLOYEES
9  (
10     EMPLOYEE_ID INT PRIMARY KEY,
11     FIRST_NAME VARCHAR(50),
12     LAST_NAME VARCHAR(50),
13     DEPARTMENT VARCHAR(50),
14     HIRE_DATE DATE,
15     SALARY INT
16 );
17
```

Insert Data:

```
18  -- Insert the data
19
20  INSERT INTO EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, DEPARTMENT, HIRE_DATE, SALARY)
21  VALUES (1, 'John', 'Doe', 'HR', '2020-01-15', 50000),
22          (2, 'Jane', 'Smith', 'IT', '2019-04-20', 60000),
23          (3, 'Michael', 'Johnson', 'Finance', '2021-08-10', 55000),
24          (4, 'Emily', 'Davis', 'Marketing', '2018-02-05', 52000),
25          (5, 'David', 'Wilson', 'IT', '2022-03-30', 62000);
26
27
```

Write SQL queries to answer the following questions using the employees table:

1. Retrieve the first and last names of all employees.

```
SELECT FIRST_NAME, LAST_NAME FROM EMPLOYEES;
```

28	
29	-- 1. Retrieve the first and last names of all employees.
30	SELECT FIRST_NAME, LAST_NAME FROM EMPLOYEES;
31	

[Results](#) [Chart](#)

	FIRST_NAME	LAST_NAME
1	John	Doe
2	Jane	Smith
3	Michael	Johnson
4	Emily	Davis
5	David	Wilson

2. Find the total number of employees in the company.

```
SELECT COUNT(*) AS TOT_EMPLOYEE FROM EMPLOYEES;
```

31	
32	-- 2. Find the total number of employees in the company.
33	SELECT COUNT(*) AS TOT_EMPLOYEE FROM EMPLOYEES;
34	

[Results](#) [Chart](#)

	TOT_EMPLOYEE
1	5

3. Get the names of employees who work in the IT department.

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS Emp_Name, DEPARTMENT  
FROM EMPLOYEES  
WHERE DEPARTMENT = 'IT';
```

35	-- 3. Get the names of employees who work in the IT department.
36	SELECT FIRST_NAME ' ' LAST_NAME AS Emp_Name, DEPARTMENT
37	FROM EMPLOYEES
38	WHERE DEPARTMENT = 'IT';
39	

[Results](#) [Chart](#)

	EMP_NAME	DEPARTMENT
1	Jane Smith	IT
2	David Wilson	IT

4. Calculate the average salary of all employees.

```
SELECT ROUND(AVG(SALARY),2) AS Avg_Salary FROM EMPLOYEES;
```

40	-- 4. Calculate the average salary of all employees.
41	SELECT ROUND(AVG(SALARY),2) AS Avg_Salary FROM EMPLOYEES;
42	
<div><div>↩ Results</div><div>📉 Chart</div></div>	
	AVG_SALARY
1	55800.00

5. Find the employee with the highest salary.

```
SELECT * FROM EMPLOYEES  
ORDER BY SALARY DESC  
LIMIT 1;
```

43

-- 5. Find the employee with the highest salary.

44

SELECT * FROM EMPLOYEES

45

ORDER BY SALARY DESC

46

LIMIT 1;

47

↶ Results

⌵ Chart

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	DEPARTMENT	HIRE_DATE	... SALARY
1	5	David	Wilson	IT	2022-03-30	62,000

6. List the employees hired before January 1, 2021, along with their hire dates.

```
SELECT EMPLOYEE_ID, FIRST_NAME || ' ' || LAST_NAME AS Emp_Name, HIRE_DATE  
FROM EMPLOYEES  
WHERE HIRE_DATE < '2021-01-01';
```

48 -- 6. List the employees hired before January 1, 2021, along with their hire dates.
49 SELECT EMPLOYEE_ID, FIRST_NAME || ' ' || LAST_NAME AS Emp_Name, HIRE_DATE
50 FROM EMPLOYEES
51 WHERE HIRE_DATE < '2021-01-01';
52

Results

Chart

	EMPLOYEE_ID	EMP_NAME	HIRE_DATE
1	1	John Doe	2020-01-15
2	2	Jane Smith	2019-04-20
3	4	Emily Davis	2018-02-05

***** **THANK YOU** *****