Consider the below two tables for reference while trying to solve the **SQL queries for practice**.

**Table – EmployeeDetails**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EmpId** | **FullName** | **ManagerId** | **DateOfJoining** | **City** |
| 121 | John Snow | 321 | 01/31/2019 | Toronto |
| 321 | Walter White | 986 | 01/30/2020 | California |
| 421 | Kuldeep Rana | 876 | 27/11/2021 | New Delhi |

**Table – EmployeeSalary**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpId** | **Project** | **Salary** | **Variable** |
| 121 | P1 | 8000 | 500 |
| 321 | P2 | 10000 | 1000 |
| 421 | P1 | 12000 | 0 |

**Ques.1. Write an SQL query to fetch the EmpId and FullName of all the employees working under the Manager with id – ‘986’.**

**Ans: SELECT EmpId,FullName From EmployeeDetails WHERE ManagerId =986**

**Ques.2. Write an SQL query to fetch the different projects available from the EmployeeSalary table.**

**Ans: SELECT DISTINCT(Project) FROM EmployeeSalary;**

**Ques.3. Write an SQL query to fetch the count of employees working in project ‘P1’.**

**Ans: SELECT count(\*) FROM EmployeeSalary WHERE Project= 'P1';**

**Ques.4. Write an SQL query to find the maximum, minimum, and average salary of the employees.**

**Ans:SELECT Max(Salary),Min(Salary),AVG(Salary) FROM EmployeeSalary;**

**Ques.5. Write an SQL query to find the employee id whose salary lies in the range of 9000 and 15000.**

**Ans:SELECT EmpId, Salary FROM EmployeeSalary WHERE Salary BETWEEN 9000 AND 15000;**

**Ques.6. Write an SQL query to fetch those employees who live in Toronto and work under the manager with ManagerId – 321.**

**Ans: SELECT EmpId, City, ManagerId FROM EmployeeDetails WHERE City='Toronto' AND ManagerId='321';**

**Ques.7. Write an SQL query to** f**etch all the employees who either live in California or work under a manager with ManagerId – 321.**

**Ans:** **SELECT EmpId, City, ManagerId FROM EmployeeDetails WHERE City='California' OR ManagerId='321'**;

**Ques.8. Write an SQL query to fetch all those employees who work on Projects other than P1.**

**Ans:** **SELECT EmpId FROM EmployeeSalary WHERE NOT Project='P1';**

**Ques.9. Write an SQL query to display the total salary of each employee adding the Salary with Variable value.**

**Ans:** **SELECT EmpId, Salary+Variable as TotalSalary FROM EmployeeSalary;**

**Ques.10. Write an SQL query to fetch the employees whose name begins with any two characters, followed by a text “hn” and ends with any sequence of characters.**

**Ans:** **SELECT FullName FROM EmployeeDetails WHERE FullName LIKE ‘\_\_hn%’;**

**Ques.11. Write an SQL query to fetch all the EmpIds which are present in either of the tables – ‘EmployeeDetails’ and ‘EmployeeSalary’.**

**Ans:** **SELECT EmpId FROM EmployeeDetails UNION SELECT EmpId FROM EmployeeSalary;**

**Ques.12. Write an SQL query to fetch common records between two tables.**

**Ans:** **SELECT \* FROM EmployeeSalary INTERSECT SELECT \* FROM ManagerSalary;**

**Ques.13. Write an SQL query to fetch records that are present in one table but not in another table.**

**Ans:** **SELECT \* FROM EmployeeSalary MINUS SELECT \* FROM ManagerSalary**

**Ques.14. Write an SQL query to fetch the EmpIds that are present in both the tables –   ‘EmployeeDetails’ and ‘EmployeeSalary.**

**Ans:** **SELECT EmpId FROM EmployeeDetails where EmpId IN (SELECT EmpId FROM EmployeeSalary);**

**Ques.15. Write an SQL query to fetch the EmpIds that are present in EmployeeDetails but not in EmployeeSalary.**

**Ans: SELECT EmpId FROM EmployeeDetails where EmpId Not IN (SELECT EmpId FROM EmployeeSalary);**

**Ques.16. Write an SQL query to fetch the employee’s full names and replace the space with ‘-’.**

**Ans:** **SELECT REPLACE(FullName, ' ', '-') FROM EmployeeDetails;**

**Ques.17. Write an SQL query to fetch the position of a given character(s) in a field.**

**Ans:** **SELECT INSTR(FullName, 'Snow') FROM EmployeeDetails;**

**Ques.18. Write an SQL query to display both the EmpId and ManagerId together.**

**Ans:** **SELECT CONCAT(EmpId, ManagerId) as NewId FROM EmployeeDetails**;

**Ques.19. Write a query to fetch only the first name(string before space) from the FullName column of the EmployeeDetails table.**

**Ans:** **SELECT MID(FullName, 1, LOCATE(' ',FullName)) FROM EmployeeDetails;**

**Ques.20. Write an SQL query to uppercase the name of the employee and lowercase the city values.**

**Ans:** **SELECT UPPER(FullName), LOWER(City) FROM EmployeeDetails;**

**Ques.21. Write an SQL query to find the count of the total occurrences of a particular character – ‘n’ in the FullName field.**

**Ans:** **SELECT FullName, LENGTH(FullName) - LENGTH(REPLACE(FullName, 'n', '')) FROM EmployeeDetails;**

**Ques.22. Write an SQL query to update the employee names by removing leading and trailing spaces.**

**Ans: UPDATE EmployeeDetails SET FullName = LTRIM(RTRIM(FullName));**

**Ques.23. Fetch all the employees who are not working on any project.**

**Ans:** **SELECT EmpId FROM EmployeeSalary WHERE Project IS NULL;**

**Ques.24. Write an SQL query to fetch employee names having a salary greater than or equal to 5000 and less than or equal to 10000.**

**Ans:** **SELECT FullName FROM EmployeeDetails WHERE EmpId IN (SELECT EmpId FROM EmployeeSalary WHERE Salary BETWEEN 5000 AND 10000);**

**Ques.25. Write an SQL query to find the current date-time.**

**Ans:** **SELECT NOW();**

**Ques.26. Write an SQL query to fetch all the Employee** details from the **EmployeeDetails table who joined in the Year 2020.**

**Ans:** **SELECT \* FROM EmployeeDetails WHERE YEAR(DateOfJoining) = '2020';**

**Ques.27. Write an SQL query to fetch all employee records from the EmployeeDetails table who have a salary record in the EmployeeSalary table.**

**Ans:** **SELECT \* FROM EmployeeDetails E WHERE EXISTS (SELECT \* FROM EmployeeSalary S WHERE E.EmpId = S.EmpId);**

**Ques.28. Write an SQL query to fetch the project-wise count of employees sorted by project’s count in descending order.**

**Ans:** **SELECT Project, count(EmpId) EmpProjectCount FROM EmployeeSalary GROUP BY Project ORDER BY EmpProjectCount DESC;**

**Ques.29. Write a query to fetch employee names and salary records. Display the employee details even if the salary record is not present for the employee.**

**Ans:** **SELECT E.FullName, S.Salary FROM EmployeeDetails E LEFT JOIN EmployeeSalary S ON E.EmpId = S.EmpId;**

d**Ques. 30. Write an SQL query to fetch all the Employees who are also managers from the EmployeeDetails table.**

**Ans:** **SELECT DISTINCT E.FullName FROM EmployeeDetails E INNER JOIN EmployeeDetails M ON E.EmpID = M.ManagerID;**