Velocity Corporate Training Center, Pune

Topic : Group by, Joins, Subqueries, window functions

1. Write down the general syntax for a SELECT statement covering all the options.
2. If we drop a table, does it also drop related objects like constraints, indexes, columns, defaults, Views, and Stored Procedures?

3. What is the difference between UNION and UNION ALL?

4. Write a Query to display the minimum salary of an employee?

5. Write a Query to display the maximum salary of an employee for each department?

6. Write a Query to count the number of employees working in the company?

7. Write a Query to count the number of employees working in the ECE department?

8. Write a Query to display the total salary of employees based on the city?

9. Write a Query to display the number of employees working in each region?

10. Write a Query to display the total salary of employees based on dept_name?

11. Write a Query to display no. of males in each department?

12. Write a Query to display the total salary of employees based on city whose total salary > 12000?

13. Find the total number of movies which has new actors.(refer movies.csv file for this)

14. Find total number of movies by genre and new director(refer movies.csv file for this)

15. Find total number of movies by genre and new director. Consider only movies which has movie names starting with 'C'(refer movies.csv file for this)

16. Find total number of movies and their avg budget by genre with movie count>50 (refer movies.csv file for this)

17. What is the difference between COUNT(*), COUNT(expression), and COUNT(DISTINCT expression)?

18. How to fetch unique records using group by function

19. Write an SQL query to find the count of employees whose salary lies in the range of 90000 and 150000 for each dept.(refer emp_data.csv)

20. Write an SQL query to fetch the project-wise count of employees sorted by project's count in descending order.

21. What are joins and its importance in SQL

22. What different types of joins we have in SQL

23. What will be the output of inner join, left join, right join and full join on below 2 tables.

Tbl1
1
0
5
7
2
5

Tbl2
2
7
5
5

24. Write a query to get common records from below three tables

Emp_Country	Emp_Email	Emp_Join Date
Germany	ashish@gmail.com	2021-04-20
India	shantanu@gmail.com	2022-12-11
India	khanak@gmail.com	2022-01-03
Europe	akshay@gmail.com	2023-02-15

Mexico	nikita@gmail.com	2020-05-23

Emp_ID	Emp_Profile	Emp_Email
101	Content Writer	ashish@gmail.com
104	Data Analyst	shantanu@gmail.com
105	Software Engineer	khanak@gmail.com
109	Development Executive	akshay@gmail.com
108	Marketing Manager	nikita@gmail.com

Emp_ID	Emp_Name	Emp_No
101	Ashish Kaktan	9450425345
102	Raj Choudhary	8462309621
103	Vivek Oberoi	7512309034
104	Shantanu Khandelwal	9020330023
105	Khanak Desai	8451004522

25.Write a SQL query to rank the scores, where rankings should be calculated according to the following rules: the scores should be ranked from the highest to the lowest; if there is a tie between two scores, both should have the same ranking; after a tie, the next ranking number should be the next consecutive integer value (i.e., there should be no holes between ranks). Return the result table ordered by score in descending order.

(Refer placement table we have for this)

26. Write an SQL query to find all numbers that appear at least three times consecutively.

Table

1
1
1
1
2
2
2
5
4
4
5

27. Write an SQL query to report all the duplicate emails.

28. Fetch the artist who have not sold any paintings(refer artists and sales table)

28.Write an SQL query to report the **first login date** for each player.Return the result table in **any order**.

player_id	device_id	event_date	games_played
1	2	2016-03-01	5
1	2	2016-05-02	6
2	3	2017-06-25	1
3	1	2016-03-02	0
3	4	2018-07-03	5

29. Update emp_data table to swap the gender values(update M where F and update F where M)

Datasets for next 2 questions:

CustomerID	Cust_name	City	Grade	First_purchase	SalesmanID
'3002'	'Nick Rimando'	'New York'	'100'	'2020-12-17'	'5001'
'3007'	'Brad\nDavis'	'New York'	'200'	'2020-11-10'	'5001'
'3005'	'Graham Zusi'	'California'	'200'	'2020-10-19'	'5002'
'3008'	'Julian Green'	'London'	'300'	'2020-02-21'	'5002'
'3004'	'Fabian Johnson'	'Paris'	'300'	'2020-06-07'	'5006'
'3009'	'Geoff Cameron'	'Berlin'	'100'	'2020-12-30'	'5003'
'3003'	'Jozy\nAltidor'	'Moscow'	'200'	'2020-09-01'	'5007'
'3001'	'BRAD Guzan'	'London'	'100'	'2020-11-29'	'5005'
'3006'	'brad Guzan'	'London'	'100'	'2020-06-20'	'5005'

SalesmanID	Name	City	Commission
'5001'	'James Hoog'	'New York'	'15'
'5002'	'Nail Knite'	'Paris'	'13'
'5005'	'Pit Alex'	'London'	'11'
'5006'	'Mc Lyon'	'Paris'	'14'
'5007'	'Paul Adam'	'Rome'	'13'
'5003'	'Lauson Hen'	'San Jose'	'12'

21. Find customer details (with salesman information) where grade is greater than 100 and commission is greater than 14. (Refer below tables)

22. Find the details for salesman and customer where customer make their first

purchase in the month of November

https://www.interviewqs.com/blog/sql-window-function-lead-lag