

PLACEMENT REFRESHER PROGRAM

Session 3 & 4

SQL 1 & 2 Question Bank

1. What is a SQL statement ?
2. What are the types of SQL commands ?
3. What are constraints in SQL ?
4. Does SQL support programming language features ?
5. What are the differences between SQL and NoSQL ?
6. What are the differences between SQL and PL/SQL ?
7. What are the differences between SQL and MySQL ?
8. What is the difference between BETWEEN and IN operators in SQL ?
9. What is the difference between CHAR and VARCHAR datatypes in SQL ?
10. What are the different types of case manipulation functions available in SQL ?
11. Explain the difference between Primary Key and Unique Key.
12. What is a Candidate Key ?
13. What is Referential Integrity in SQL ?
14. What is a Default Constraint ?
15. Explain the difference between DROP, DELETE and TRUNCATE.
16. What is Normalization ?
17. What is the difference between 2NF and 3NF ?
18. Explain the difference between WHERE and HAVING Clause in SQL.
19. What is a Schema ?
20. How do you add comments in SQL ?
21. Explain the types of SQL Operators.
22. Given a table, count the number of records available in the table.
23. What is an alias ?
24. What are views ?
25. Explain Index and its types.
26. Explain the difference between aggregate and scalar functions.
27. What are the different types of character manipulation functions available in SQL ?
28. What is the default data ordering with the ORDER BY statement, and how do you change it?
29. What are set Operators ?
30. What operator is used in the query for pattern matching ?

QUERY BASED QUESTIONS

1. Write a SQL Query to retrieve all employees from the "employees" table with salaries greater than \$50,000.
2. Write a SQL Query to list the names of all products from the "products" table in descending order of their prices.
3. Write a SQL Query to find the total count of orders placed by customers from the "orders" table.
4. Write a SQL Query to calculate the average salary of employees in the "employees" table for each department.
5. Write a SQL Query to retrieve the first five customer records from the "customers" table in alphabetical order.
6. Write a SQL Query to insert a new customer record into the "customers" table with the name "John Smith."
7. Write a SQL Query to update the email address for the customer with ID 123 to "newemail@example.com."
8. Write a SQL Query to delete all products from the "products" table with prices less than \$10.
9. Write a SQL Query to insert a new order for customer 456 with a total amount of \$500 into the "orders" table.
10. Write a SQL Query to update the salary of all employees in the "employees" table by adding a 10% raise.
11. Write a SQL Query to retrieve the names of customers along with their corresponding order IDs from the "customers" and "orders" tables.
12. Write a SQL Query to list products along with their categories from the "products" and "categories" tables.
13. Write a SQL Query to find all employees along with their manager's names from the "employees" table.
14. Write a SQL Query to retrieve the total purchase amount of each customer from the "customers" and "orders" tables.
15. Write a SQL Query to find the names of products and their corresponding suppliers from the "products" and "suppliers" tables.
16. Write a SQL Query to find the names of customers who placed orders with a total amount greater than \$1,000.
17. Write a SQL Query to list employees with salaries greater than the average salary in their department.
18. Write a SQL Query to retrieve the names of products that have never been ordered from the "products" and "order_details" tables.
19. Write a SQL Query to find the customer with the highest total purchase amount from the "customers" and "orders" tables.

20. Write a SQL Query to find the names of employees who have been with the company the longest from the "employees" table.
21. Write a SQL Query to retrieve a list of customers who made the highest total purchase amount from the "customers" and "orders" tables.
22. Write a SQL Query to find all products that have never been ordered by any customer from the "products," "customers," and "order_details" tables.
23. Write a SQL Query to list employees who have the same manager from the "employees" table.
24. Write a SQL Query to calculate the average salary of employees in each department and display only those departments with an average salary greater than \$60,000 from the "employees" table.
25. Write a SQL Query to delete all orders placed by customers who haven't made any purchases in the last six months from the "customers" and "orders" tables.
26. Write a SQL Query to find products that are sold out from the "products" and "order_details" tables.
27. Write a SQL Query to find the top 5 customers who made the most recent orders from the "customers" and "orders" tables.
28. Write a SQL Query to retrieve a list of employees from the "employees" table who have been with the company for at least five years but not more than ten years.
29. Write a SQL Query to calculate the running total of sales from the "sales" table for each month.
30. Write a SQL Query to find the employees with the highest and lowest salaries within each department from the "employees" table.