EmployeeInfo Table:

EmpID	EmpFname	EmpLname	Department	Project	Address	DOB	Gender
1	Sanjay	Mehra	HR	P1	Hyderabad(HYD)	01/12/1976	M
2	Ananya	Mishra	Admin	P2	Delhi(DEL)	02/05/1968	F
3	Rohan	Diwan	Account	P3	Mumbai(BOM)	01/01/1980	M
4	Sonia	Kulkarni	HR	P1	Hyderabad(HYD)	02/05/1992	F
5	Ankit	Kapoor	Admin	P2	Delhi(DEL)	03/07/1994	M

EmployeePosition Table:

EmpID	EmpPosition	DateOfJoining	Salary
1	Manager	01/05/2022	500000
2	Executive	02/05/2022	75000
3	Manager	01/05/2022	90000
2	Lead	02/05/2022	85000
1	Executive	01/05/2022	300000

Let us start by taking a look at some of the most frequently asked SQL Query interview questions.

Q1. Write a query to fetch the EmpFname from the EmployeeInfo table in upper case and use the ALIAS name as EmpName.

```
SELECT UPPER(EmpFname) AS EmpName FROM EmployeeInfo;
```

Q2. Write a query to fetch the number of employees working in the department ‘HR’.

```
SELECT COUNT(*) FROM EmployeeInfo WHERE Department = 'HR';
```

Q3. Write a query to get the current date.

You can write a query as follows in SQL Server:

```
SELECT GETDATE();
```

You can write a query as follows in MySQL:

```
SELECT SYSTDATE();
```

Q4. Write a query to retrieve the first four characters of EmpLname from the EmployeeInfo table.

```
1  SELECT SUBSTRING(EmpLname, 1, 4) FROM EmployeeInfo;
```

Q5. Write a query to fetch only the place name(string before brackets) from the Address column of EmployeeInfo table.

Using the MID function in MySQL

```
1  SELECT MID(Address, 0, LOCATE('(',Address)) FROM EmployeeInfo;
```

Using SUBSTRING

```
1  SELECT SUBSTRING(Address, 1, CHARINDEX('(',Address)) FROM EmployeeInfo;
```

Q6. Write a query to create a new table which consists of data and structure copied from the other table.

Using the SELECT INTO command:

```
1  SELECT * INTO NewTable FROM EmployeeInfo WHERE 1 = 0;
```

Using the CREATE command in MySQL:

```
1  CREATE TABLE NewTable AS SELECT * FROM EmployeeInfo;
```

Q7. Write q query to find all the employees whose salary is between 50000 to 100000.

```
1  SELECT * FROM EmployeePosition WHERE Salary BETWEEN '50000' AND '100000';
```

Q8. Write a query to find the names of employees that begin with 'S'

```
1  SELECT * FROM EmployeeInfo WHERE EmpFname LIKE 'S%';
```

Q9. Write a query to fetch top N records.

By using the TOP command in SQL Server:

```
1  SELECT TOP N * FROM EmployeePosition ORDER BY Salary DESC;
```

By using the LIMIT command in MySQL:

```
1  SELECT * FROM EmpPosition ORDER BY Salary DESC LIMIT N;
```

Q10. Write a query to retrieve the EmpFname and EmpLname in a single column as "FullName". The first name and the last name must be separated with space.

```
1  SELECT CONCAT(EmpFname, ' ', EmpLname) AS 'FullName' FROM EmployeeInfo;
```

Q11. Write a query find number of employees whose DOB is between 02/05/1970 to 31/12/1975 and are grouped according to gender

```
1  SELECT COUNT(*), Gender FROM EmployeeInfo WHERE DOB BETWEEN '02/05/1970 '
                                AND '31/12/1975' GROUP BY Gender;
```

Q12. Write a query to fetch all the records from the EmployeeInfo table ordered by EmpLname in descending order and Department in the ascending order.

To order the records in ascending and descnding order, you have to use the ORDER BY statement in SQL.

```
SELECT * FROM EmployeeInfo ORDER BY EmpFname desc, Department asc;
```

Q13. Write a query to fetch details of employees whose EmpLname ends with an alphabet ‘A’ and contains five alphabets.

To fetch details mathcing a certain value, you have to use the LIKE operator in SQL.

```
SELECT * FROM EmployeeInfo WHERE EmpLname LIKE '____a';
```

Q14. Write a query to fetch details of all employees excluding the employees with first names, “Sanjay” and “Sonia” from the EmployeeInfo table.

```
SELECT * FROM EmployeeInfo WHERE EmpFname NOT IN ('Sanjay','Sonia');
```

Q15. Write a query to fetch details of employees with the address as “DELHI(DEL)”.

```
SELECT * FROM EmployeeInfo WHERE Address LIKE 'DELHI(DEL)%';
```

Q16. Write a query to fetch all employees who also hold the managerial position.

```
SELECT E.EmpFname, E.EmpLname, P.EmpPosition
FROM EmployeeInfo E INNER JOIN EmployeePosition P ON
E.EmpID = P.EmpID AND P.EmpPosition IN ('Manager');
```

Q17. Write a query to fetch the department-wise count of employees sorted by department’s count in ascending order.

```
SELECT Department, count(EmpID) AS EmpDeptCount
FROM EmployeeInfo GROUP BY Department
ORDER BY EmpDeptCount ASC;
```

Q18. Write a query to calculate the even and odd records from a table.

To retrieve the even records from a table, you have to use the MOD() function as follows:

```
SELECT EmpID FROM (SELECT rowno, EmpID from EmployeeInfo) WHERE MOD(rowno,2)=0;
```

Similarly, to retrieve the odd records from a table, you can write a query as follows:

```
SELECT EmpID FROM (SELECT rowno, EmpID from EmployeeInfo) WHERE MOD(rowno,2)=1;
```

Q19. Write a SQL query to retrieve employee details from EmployeeInfo table who have a date of joining in the EmployeePosition table.

```
SELECT * FROM EmployeeInfo E
WHERE EXISTS
(SELECT * FROM EmployeePosition P WHERE E.EmpId = P.EmpId);
```

Q20. Write a query to retrieve two minimum and maximum salaries from the EmployeePosition table.

To retrieve two minimum salaries, you can write a query as below:

```
SELECT DISTINCT Salary FROM EmployeePosition E1
WHERE 2 >= (SELECTCOUNT(DISTINCT Salary)FROM EmployeePosition E2
WHERE E1.Salary >= E2.Salary) ORDER BY E1.Salary DESC;
```

To retrieve two maximum salaries, you can write a query as below:

```
SELECT DISTINCT Salary FROM EmployeePosition E1
WHERE 2 >= (SELECTCOUNT(DISTINCT Salary) FROM EmployeePosition E2
WHERE E1.Salary <= E2.Salary) ORDER BY E1.Salary DESC;
```

Q21. Write a query to find the Nth highest salary from the table without using TOP/limit keyword.

```
SELECT Salary
FROM EmployeePosition E1
WHERE N-1 = (
SELECT COUNT( DISTINCT ( E2.Salary ) )
FROM EmployeePosition E2
WHERE E2.Salary > E1.Salary );
```

Q22. Write a query to retrieve duplicate records from a table.

```
SELECT EmpID, EmpFname, Department COUNT(*)
FROM EmployeeInfo GROUP BY EmpID, EmpFname, Department
HAVING COUNT(*) > 1;
```

Q23. Write a query to retrieve the list of employees working in the same department.

```
Select DISTINCT E.EmpID, E.EmpFname, E.Department
FROM EmployeeInfo E, Employee E1
WHERE E.Department = E1.Department AND E.EmpID != E1.EmpID;
```

Q24. Write a query to retrieve the last 3 records from the EmployeeInfo table.

```
SELECT * FROM EmployeeInfo WHERE
EmpID <=3 UNION SELECT * FROM
(SELECT * FROM EmployeeInfo E ORDER BY E.EmpID DESC)
AS E1 WHERE E1.EmpID <=3;
```

Q25. Write a query to find the third-highest salary from the EmpPosition table.

```
SELECT TOP 1 salary
FROM(
SELECT TOP 3 salary
FROM employee_table
ORDER BY salary DESC) AS emp
```

```
5                                   ORDER BY salary ASC;
6
```

Q26. Write a query to display the first and the last record from the EmployeeInfo table.

To display the first record from the EmployeeInfo table, you can write a query as follows:

```
1       SELECT * FROM EmployeeInfo WHERE EmpID = (SELECT MIN(EmpID) FROM EmployeeInfo);
```

To display the last record from the EmployeeInfo table, you can write a query as follows:

```
1       SELECT * FROM EmployeeInfo WHERE EmpID = (SELECT MAX(EmpID) FROM EmployeeInfo);
```

Q27. Write a query to add email validation to your database

```
1       SELECT Email FROM EmployeeInfo WHERE NOT REGEXP_LIKE(Email, '[A-Z0-9._%+-]+@[A-
```

Q28. Write a query to retrieve Departments who have less than 2 employees working in it.

```
1       SELECT DEPARTMENT, COUNT(EmpID) as 'EmpNo' FROM EmployeeInfo GROUP BY DEPARTMENT
```

Q29. Write a query to retrieve EmpPostion along with total salaries paid for each of them.

```
1       SELECT EmpPosition, SUM(Salary) from EmployeePosition GROUP BY EmpPosition;
```

Q30. Write a query to fetch 50% records from the EmployeeInfo table.

```
1                                   SELECT *
2                                   FROM EmployeeInfo WHERE
3                               EmpID <= (SELECT COUNT(EmpID)/2 from EmployeeInfo);
```