



# Daily SQL Interview Questions





# **11. What is join?**

## **Explain the different types.**





**This is a keyword used to query data from more tables based on the relationship between the fields of the tables. Keys play a major role when JOINS are used.**

- **LEFT JOIN**
- **RIGHT JOIN**
- **INNER JOIN**
- **FULL OUTER JOIN**



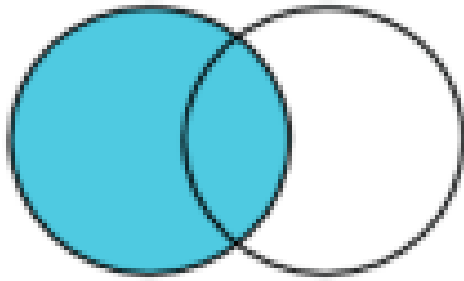
**There are various types of joins which can be used to retrieve data and it depends on the relationship between tables.**

- Left Outer Join: If we want all the records from left table and only matching records from right table then will use left outer join/left join.**
- Right Outer Join: If we want to display all the records from right table and only matching records from left table then will right outer join/right join.**

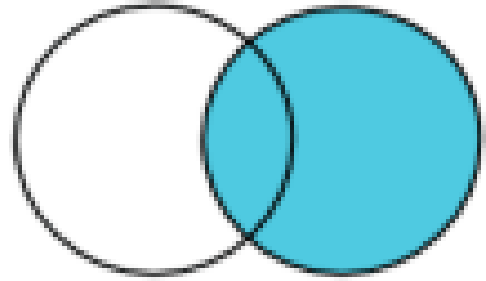


**Full Outer Join: If we want to display all the records from both the tables then will use full outer join.**

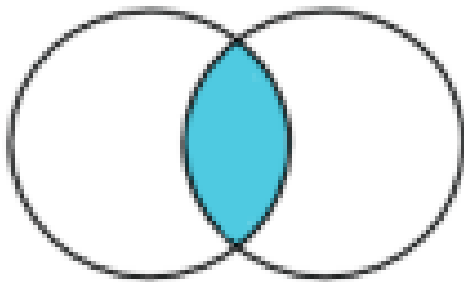
**Inner Join: If we want only the matching records from both the tables then will use Inner join/Simple join.**



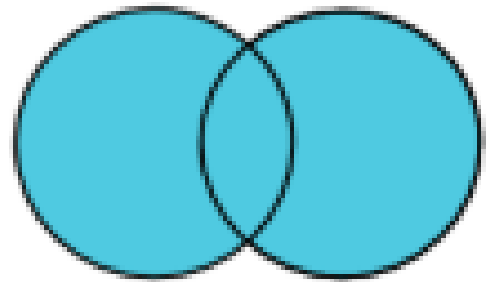
**Left Join**



**Right Join**



**Inner Join**



**Full Outer  
Join**



**12. Explain the different types of normalization.**





**First Normal Form (1NF)**: This should remove all the duplicate columns from the table. Creation of tables for the related data and identification of unique columns.

**Second Normal Form (2NF)**: Meeting all requirements of the first normal form. Placing the subsets of data in separate tables and Creation of relationships between the tables using primary keys.





**Third Normal Form (3NF)**: This should meet all requirements of 2NF.

Removing the columns which are not dependent on primary key constraints.

**Fourth Normal Form (4NF)**: Meeting all the requirements of third normal form and it should not have multi-valued dependencies.





**13. What are the  
different types of  
indexes?**





**An index is a performance tuning method of allowing faster retrieval of records from the table. An index creates an entry for each value and makes it faster to retrieve data.**

**There are three types of indexes:**





## **Unique Index:**

- **This indexing does not allow the field to have duplicate values if the column is unique indexed. Unique index can be applied automatically when primary key is defined.**





## **Clustered Index:**

**This type of index reorders the physical order of the table and search based on the key values. Each table can have only one clustered index.**





## **Non-Clustered Index:**

**Non-Clustered Index does not alter the physical order of the table and maintains logical order of data. Each table can have 999 non clustered indexes**





# **14. What is query?**





- **A DB query is a code written in order to get the information back from the database.**
- **Queries can be designed in such a way that it matches with our expectation of the result set**







# **15. What is a trigger?**





**A DB trigger is a code or programs that automatically execute with response to some event on a table or view in a database. Mainly, trigger helps to maintain the integrity of the database.**

**Example: When a new student is added to the student database, new records should be created in the related tables such as the Exam, Score and Attendance tables.**



**Thank You**

