1.List the type of joins. Explain every join type with an equivalent

SQL statement.

ANSWER1:

There are four types of joins in SQL:

1. Inner join
2. Left join (or left outer join)
3. Right join (or right outer join)
4. Full outer join

An inner join returns only the rows that have matching values in both tables being joined. The following is an example of an inner join:

SELECT \*

FROM table1

INNER JOIN table2

ON table1.column = table2.column;

A left join returns all the rows from the left table and the matching rows from the right table. If there is no match in the right table, NULL values are returned. The following is an example of a left join:

SELECT \*

FROM table1

LEFT JOIN table2

ON table1.column = table2.column;

A right join returns all the rows from the right table and the matching rows from the left table. If there is no match in the left table, NULL values are returned. The following is an example of a right join:

SELECT \*

FROM table1

RIGHT JOIN table2

ON table1.column = table2.column;

A full outer join returns all the rows from both tables and NULL values are returned for non-matching rows. The following is an example of a full outer join:

SELECT \*

FROM table1

FULL OUTER JOIN table2

ON table1.column = table2.column;

2.List and explain the set operations.

ANSWER 2: SQL set operators are used to combine the results obtained from two or more queries into a single result. The queries which contain two or more subqueries are known as compounded queries. There are four major types of SQL operators:

1. UNION
2. UNION ALL
3. INTERSECT
4. MINUS (or EXCEPT)

The UNION operator is used to combine the results of two SELECT statements into a single result set. [The SELECT statements must have the same number of columns and compatible data types in order to use the UNION operator**1**](https://www.educba.com/sql-set-operators/).

The UNION ALL operator is similar to the UNION operator, but it does not eliminate duplicate rows from the result set[**1**](https://www.educba.com/sql-set-operators/).

The INTERSECT operator is used to return only the rows that are returned by both SELECT statements[**1**](https://www.educba.com/sql-set-operators/).

The MINUS (or EXCEPT) operator is used to return only the rows that are returned by the first SELECT statement but not by the second SELECT statement[**1**](https://www.educba.com/sql-set-operators/).

Here’s an example of how to use the UNION operator:

SELECT column1, column2

FROM table1

UNION

SELECT column1, column2

FROM table2;

3.How to rename a column?

ANSWER 3: You can use the ALTER TABLE command along with the RENAME COLUMN command to change the name of a column in SQL. Here’s the syntax:

ALTER TABLE table\_name RENAME COLUMN oldcolumn\_name to newcolumn\_name;

For example, if you want to rename the column “old\_column\_name” to “new\_column\_name” in the “table\_name” table, you would use the following SQL statement:

ALTER TABLE table\_name RENAME COLUMN old\_column\_name TO new\_column\_name;

4. Assume you need to create a large table for collecting patient information and retrieving the available doctors for them in a multi-speciality hospital • Create a table with at least 20 attributes • Assign primary key for a specific column •Generate 20 tuples. • Now select the doctors and their specialisation: o match patients with doctors’ specialisation and retrieve Assignment 2: Use the ER diagram for Healthcare Industry which yu have created in previous assignment and construct a table consists of “CORONA” Prevention entities along with suitable attributes. Assume the various constraints and cardinality ratios among entities. 1.Now retrieve patients location wise 2. Now retrieve patients age wise 3. Now retrieve patients gender wise 4. Now retrieve patients with other diseases wise Note: Generate 20 matching records.