Milad Azizi

4/1/2021

1. Explain different joins in a SQL table?

Inner join: return all matched values between both tables as long as there is a common column between them

Left join: return all rows from the left table with all matched record from the right tables

Right join: return all rows from the right table with all matched record from the right tables

Full Outer join: return all rows from both tables as long as there is a match in either or right table.

Cross join: does not link tables on common column field, but list all combinations of rows between both tables

Self-join: when you join a table on itself, the table has a foreign key or field that points to a value from its primary key column

Multi join: a single join happens between two tables, but can latch on multiple joins together to have joins between many tables

Anti-join: returns matches from the first table where no matches were found in the second table

2.in SQL, what is an inner join, and what is an outer join?

Inner join: data that does not have an associated common field between tables is not shown

Outer join: all rows displayed from both tables regardless of if there is a common field between them.

3.what SQL query have you used?

SELECT \* FROM <given column> where conditions,

SELECT \* FROM table1 LEFT JOIN table2 ON table1.column = table2.column

SELECT \* FROM table1 inner JOIN table2 ON table1.column = table2.column

SELECT \* FROM table1 FULL JOIN table2 ON table1.column = table2.column

SELECT <given column> FROM WHERE condition GROUP BY <given column>

...

4.write a SQL query to find the person in the database with the second highest salary?

SELECT \* FROM <given table>

ORDER BY salary DESC

**OFFSET 1 rows** 

## FETCH NEXT 1 ROWS ONLY;

5. What project have you worked on at school and the JUMP program?

I worked on a Data visualization project. I was tasked to clean the given data set and import it into Oracle DB and normalize the given data set. After I had to connect Jupyer-notebook to Oracle DB to read the Data set from Oracle DB directly and opened it on Jupyter-notebook and created the required Data Frames from the cleaned dataset by import and use of pandas module and I used the matplotlib module to visualize the data in the different charts by using matplotlib.