

SQL Assignment 1

1. Think of 5 real life example of rows and columns and list them down. Explain for each example- why you think it should be considered as a row or a column.

2. Imagine you are the lead data analyst at an ecommerce, you are working with user data (personal information), their order related information (what was ordered, when was ordered, when was shipped, when was delivered, etc.), product related information (name, price, which order it belongs to, who supplies it, etc.). Think how you can present this data in forms of relational tables - design an extensive database (extensive meaning - think of all possible sorts of data you would like to be storing in your database tables) for storing all relevant data to your business. Use Google Spreadsheet / MS Excel to create your tables and define their relationships amongst each other. Do not forget to cover all the elements required to design a database (recall what we did in class).

3. Think how does a company like facebook manage to store trillions of GB of User Information, their videos, pictures, privacy settings, passwords, sensitive information etc. - Design a database for storing all information that goes on the facebook website.

4. Imagine you are an analyst at Swiggy, you are dealing with millions of data records which keep growing everyday - design an extensive database for storing all user and order related data.

5. If you are given a table that consists of cricketer data - think of an exhaustive list of operations you might want to perform on this table (Note - we don't require the syntax or

code, just the name of operation that you think you can perform)

You have following columns in the table:

1. Batsman_Name
2. Batsman_Order (1,2,3 etc.)
3. Player_Type (Batsman, Bowler, All Rounder etc.)
4. Runs_Scored (Total runs scored till date)
5. Debut_Year
6. City (Example Virat Kohli belongs to Delhi).

Example:

1. An operation performed to read the entire table.
2. An operation performed to update the total runs scored of Virat Kohli. Etc.

Submit the list of operations you can think of in sequential manner.