SQL1 WORKSHEET

1. A) Create, D) ALTER
2. A) Update, B) Delete
3. B) Structured Query Language
4. B) Data Definition Language
5. A) Data Manipulation Language
6. C) Create Table A (B int,C float)
7. B) Alter Table A ADD COLUMN D float
8. B) Alter Table A Drop Column D
9. B) Alter Table A Alter Column D int
10. A) Alter Table A Add Constraint Primary Key B
11. What is data-warehouse?

* A data warehouse is a process of collecting, manipulating large data-sets from different sources and provide a meaningful business insights. Data warehouse in mainly used for reporting and data analysis. In retail operations, Data warehouse is used for distribution and marketing of a product/categories of products. It also helps to keep track of items, customer buying behaviour, promotions and also used for finding out the pricing policy

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1. What is the difference between OLTP VS OLAP?

* Online transaction processing provides transaction-oriented applications in a 3-tier architecture. OLTP performs day to day transaction of an enterprise. It consists of operational data used for business tasks. In OLTP datasets are relatively small in size.
* Online Analytical Processing comprises of a type of software packages that are used for data analysis for business decisions. OLAP supports an environment to get insights from the database retrieved from multiple database systems at one time.

Any type movie recommendations system like Netflix/Amazon prime is an example of OLAP wherein search pattern data gets fetched from the data warehouse that is used for business decision making.

1. What are the various characteristics of data-warehouse?

* Data warehouse mainly has four characteristics
* Integrated
* Non-volatile
* Subject oriented
* Time Variant
* Integrated- A data warehouse fetched the data from the different sources. But while identifying and extracting the data it is uniform format. Apart from that the naming conventions, codes should be reliable and make easier for data analysis.
* Non-volatile- It means once the data is inserted into the data warehouse it will not be changed/modified. The Historical Data is useful for business purpose and helps us understands the patterns while dealing with large data set.
* Subject oriented- A data warehouse is typically a subject oriented as it provides information about a subject instead of organization’s current operations. It can be achieved on specific matter. That means the data warehousing process is proposed to handle with a specific theme which is more defined. These topic can be sales, distributions, operations etc.
* Time Variant- In the data warehouse data is kept for different intervals of time. This differ with the transactions system, where often only the most recent data is kept inside the data warehouse system.

1. What is Star-Schema??

* **Star Schema** in data warehouse, in which the centre of the star can have one fact table and a number of associated dimension tables contains attributes. It is known as star schema as its structure looks like a star structure. The Star Schema data model is the easiest type of Data Warehouse schema. It is optimized for querying large data sets in the data warehouse.

1. What do you mean by SETL?

* SETL builds on Semantic Web (SW) standards and tools and supports developers by offering a number of powerful modules, classes, and methods for (dimensional and semantic) DW constructs and tasks. Thus it backs the semantic data sources apart traditional data sources, semantic integration, and creating a semantic (multidimensional) DW in terms of a knowledge base. A full-fledged experimental evaluation contrast SETL to a solution made with traditional tools on a concrete use case, shows that SETL provides better programmer productivity, knowledge base quality, and performance.