# WORKSHEET 1 SQL

Q.1 Which of the following is/are DDL commands in SQL?
a) Create b)Update c)Delete d)ALTER
Ans. DDL contains commands like CREATE, ALTER, and ANALYZE which are used to create tables, view stored subprograms and packages in a database schema.

Q.2 Which of the following is/are DML commands in SQL?
a) Update b)Delete c)Select d) Drop
Ans. DML contains commands like Select, Delete and Update .

Q.3 Full Form of SQL is :
a) Strut querying language
b) Structured Query Language
c) Simple Query Language
d) None of them
Ans. b) Structured Query Language

Q.4 Full Form of DDL is :
a) Descriptive Designed Language
b) Data Definition Langauge
c) Data Descriptive Language
d) None of the above
Ans. b) Data Definition Language

Q.5 DML is:
a) Data Manipulation Language
b) Data Management Language
c) Data Modeling Language
d) None of these
Ans. a) Data Manipulation Language

Q.6 Which of the following statements can be used to create a table with column B int type and C float type?
a) Table A ( B int, C float)
b) Create A ( b int, C float)
c) Create Table A (B int, C float)
d) All of them

Ans. c)  Create Table A (B int, C float)

Q.7  Which of the following statements can be used to add a column D (float type ) to the table A created above?
a)Table A ( D float)
b) Alter Table A ADD COLUMN D float
c) Table A ( B int, C float, D float)
d) None of them
Ans. b) Alter Table A ADD COLUMN D float

Q.8  Which of the following statement can be used to drop the column added in the above question?
a) Table A Drop D
b) Alter Table A Drop column D
c) Delete D from A
d) None of them
Ans. b) Alter Table A Drop column D

Q.9  Which of the following statement can be used to change the data type ( from float to int ) of the column Dof table created in above questions?
a) Table A (D float int )
b) Alter Table A Alter Column D int
c) Alter Table A D float int
d) Alter Table A Column D float to int
Ans. b) Alter Table A Alter Column D int

Q.10  Suppose we want to make Column B of Table A as primary key of the table. By which of the following statement we can do it?
a) Alter Table A Add Constraint Primary Key B
b) Alter Table ( B primary key )
c) Alter Table A Add primary key B
d) None of them
Ans. c) Alter Table A Add primary key B

Q.11  What is data-warehouse?

Ans. Data warehouse is a process for collecting and managing data from varied sources to provide meaningful business insights. A data warehouse is typically used to connect and analyze business data from heterogenous sources. The data warehouse is the core of the BI system which is built for data analysis and reporting.It is electronic storage of a large amount of information by a business which is designed for query and analysis instead of transaction processing.

Q.12 What is the difference between OLTP and OLAP?
Ans. OLTP and OLAP both are the online processing systems.OLTP is a transactional processing while OLAP is an analytical processing system . OLTP is a system that manages transaction oriented applications on the internet for example, ATM. OLAP is an online system that reports to multidimensional analytical queries like financial reporting etc.

Q.13 What are the various characterstics of data-warehouse?
Ans. 1.**Subject-oriented –**
A data warehouse is always a subject oriented as it delivers information about a theme instead of organization's current operations. It can be achieved on specific theme. That means the data warehousing process is proposed to handle with a specific theme which is more defined. These themes can be sales, distributions, marketing etc.

A data warehouse never put emphasis only current operations. Instead, it focuses on demonstrating and analysis of data to make various decision. It also delivers an easy and precise demonstration around particular theme by eliminating data which is not required to make the decisions.

**2.Integrated –**
It is somewhere same as subject orientation which is made in a reliable format. Integration means founding a shared entity to scale the all similar data from the different databases. The data also required to be resided into various data warehouse in shared and generally granted manner.

A data warehouse is built by integrating data from various sources of data such that a mainframe and a relational database. In addition, it must have reliable naming conventions, format and codes. Integration of data warehouse benefits in effective analysis of data. Reliability in naming conventions, column scaling, encoding structure etc. should be confirmed. Integration of data warehouse handles various subject related warehouse.

**3.Time-Variant –**
In this data is maintained via different intervals of time such as weekly, monthly, or annually etc. It founds various time limit which are structured between the large datasets and are held in online transaction process (OLTP). The time limits for data warehouse is wide-ranged than that of operational systems. The data resided in data warehouse is predictable with a specific interval of time and delivers information from the historical perspective. It comprises elements of time explicitly or implicitly. Another feature of time-variance is that once data is stored in the data warehouse then it cannot be modified, alter, or updated.

**4.Non-Volatile –**
As the name defines the data resided in data warehouse is permanent. It also means that data is not erased or deleted when new data is inserted. It includes the mammoth quantity of data that is inserted into modification between the selected quantity on logical business. It evaluates the analysis within the technologies of warehouse.

In this, data is read-only and refreshed at particular intervals. This is beneficial in analysing historical data and in comprehension the functionality. It does not need transaction process, recapture and concurrency control mechanism. Functionalities such as delete, update, and insert that are done in an operational application are lost in data warehouse environment. Two types of data operations done in the data warehouse are:

- Data Loading
- Data Access

Q.14 What is star-schema?

Ans. A star schema is a database organizational structure optimized for use in a data warehouse or business intelligence that uses a single large fact table to store transactional or measured data, and one or more smaller dimensional tables that store attributes about the data.

**Characteristics of a Star Schema**

- Creates a denormalized database that can quickly provide query responses.
- Provides a flexible design that can be changed easily or added to throughout the development cycle, and as the database grows.
- Provides a parallel in design to how end users typically think of and use the data.

Q.15 What do you mean by SETL?

Ans. **SETL** (SET Language) is a very high-level programming language based on the mathematical t SETL provides two basic aggregate data types: *unordered sets*, and *sequences* (the latter also called *tuples*). The elements of sets and tuples can be of any arbitrary type, including sets and tuples themselves. *Maps* are provided as sets of *pairs* (i.e., tuples of length 2) and can have arbitrary domain and range types. Primitive operations in SETL include set membership, union, intersection, and power set construction, among others.heory of sets.