# Answers for SQL Worksheet-1

1. A) Create, D) ALTER

2. A) Update, C) Select, 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. Data warehouse is a data management system that is designed to support activities like data analytics. These data warehouses are mainly intended to perform data queries and analysis that usually contains large amount of stored data.

12.

| S no. | OLTP | OLAP |
|---|---|---|
| 1 | OLTP stands for On-Line Transactional Processing and is used for managing large number of online short transactions. | OLAP stands for On-Line Analytical processing and it is used for data analysis. |
| 2 | It used traditional Data Base Management System (DBMS). | It uses data warehouse |
| 3 | The response time of these systems are fast. | The response time is longer. |
| 4 | It is mainly used for data reading | It can manage all insert, update and delete transactions. |

13. Different characteristics of a data warehouse are:

- **Subject-Oriented**: This characteristic focuses on the subject oriented specific theme instead of the organization's current operations and are proposed to handle with specific themes that are more defined. These themes can be of any department like sales, marketing, distributions, etc.
- **Integrated**: A data warehouse is built by integrating data from various sources of data such that a mainframe and a relational database. Integration means founding a shared entity to scale the all-similar data from the different databases.

- **Time Variant:** The data collected in a data warehouse is identified with a particular time period. The data in a data warehouse provides information from the historical point of view.
- **Non-volatile:** Non-volatile means the previous data is not erased when new data is added to it. A data warehouse is kept separate from the operational database and therefore frequent changes in operational database is not reflected in the data warehouse.

14. Star schema is the fundamental schema among the data mart schema. In this schema the center of the star can have one fact table and a number of associated dimension tables. It is known as star schema as its structure resembles a star. The Star Schema data model is the simplest type of Data Warehouse schema. It is also known as Star Join Schema and is optimized for querying large data sets.

15. SETL is a very-high level language with dynamic typing and dynamic data structures, based on the mathematical notion of set.