Worksheet 1 SQL

Answers

Q1 A) Create D) Alter

Q2 A) Update B) Delete C) Select

Q3 B) Structured Query language

Q4 B) Data Definition language

Q5 A) Data Manipulation language

Q6 C) Create table A (B int, C float)

Q7 B) Alter Table A ADD COLUMN D float

Q8 B) Alter Table A DROP COLUMN D

Q9 B) Alter Table A Alter COLUMN D int

Q10 C) Alter Table A Add Primary key B

Q11

- Basically, It stores data in relational table's using columnar storage which reduces the data storage costs, and improves query performance.
- It also leverage's a scale-out architecture to distribute computational processing of data across multiple nodes.

Q12

- OLTP stands for online transaction processing (OLTP), whereas OLAP stands for online analytical processing.
- The basic difference between OLTP and OLAP is that OLTP works with the processing of transactions, OLAP is more focused on analytical processing.
- Example - For OLTP is for Credit card activity. For OLAP is for Annual financial performance

Q13

- A Data warehouse is subject oriented - It is subject-oriented and does not mainly concentrate on ongoing processes
- Data warehouse support integration- It is capable of combining data from various sources such as a mainframe, relational databases, flat files, etc
- Data warehouse are non-volatile- Data in a data warehouse is subject to the same standards of quality and consistency as data used in the business
- Data in warehouse are predictable with time intervals - The data comprises elements of time either implicitly or explicitly, thus supporting the non-volatility features of data warehouses.

Q14

- Star Schema in data warehouse, is a schema in which the centre 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.

Q15

- SETL - stands for Semantic Extract Transform Load

- For better business analytics organization uses data from various sources. The data so obtained may be unstructured, semi structured or structured, So there is a process called ETL or Extract Transform Load
- ETL describes the process of integrating raw data from various data sources into a repository, main purpose is to maintain the Data quality & trust. ETL requires 3 operations

- Extract:- Getting a copy of data from a source, which could be an application, database, or text file.

- Transform :- Translates the source data to match the format of the target system. This includes changing data types, combining, or splitting fields & applying more complex formulas.

- Load :- Completes the process by putting the transformed data in the target system.But this method is losing its efficiency as it does take semantics into account, This hamper the analysis to overcome this SETL has been introduced.