Worksheet – 1

SQL

Question 1- Which of the following is/are DDL commands in SQL?

A) Create B) Update

C) Delete D) ALTER

Answer - A) Create D) Alter

Question 2- Which of the following is/are DML commands in SQL?

A) Update B) Delete

C) Select D) Drop

Answer - A) Update B) Delete C) Select

Question 3 – Full form of SQL is:

A) Strut querying language B) Structured Query Language

C) Simple Query Language D) None of them

Answer - B) Structured Query Language

Question 4 – Full form of DDL is:

A) Descriptive Designed Language B) Data Definition Language

C) Data Descriptive Language D) None of the above.

Answer - B) Data Definition language

Queston 5 – DML is:

A) Data Manipulation Language B) Data Management Language

C) Data Modelling Language D) None of these

Answer - A) Data Manipulation language

Question 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

Answer C) Create Table A (B int,C float)

Question 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

Answer - B) Alter Table A ADD COLUMN D float

Question 8- Which of the following statements 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

Answer - B) Alter Table A Drop Column D

Question 9- Which of the following statements can be used to change the data type (from float to int) of the column D of table A 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

Answer - D) Alter table A Column D float to int

Question 10- Suppose we want to make Column B of Table A as primary key of the table. By which of the following statements 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

Answer - A) Alter Table A Add Constraint Primary Key B

Question 11 – What is data-warehouse?

Answer - Data- warehouse is nothing but a centralise location where all the enterprise data from the database systems and the file system gets stored for further analysis. A Data – warehouse (DW) is a process of collecting and managing data from varied sources to provide meaningful business insights. A data warehouse is typically used to connect and analyse 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 a blend of technologies and components which aids the strategic use of data. It is electronic storage of a large amount of information by a business which is designed for query and analysis instead of transaction processing. It is a process of transforming data into information and making it available to users in timely manner to make a difference.

Question 12- What is the difference between OLTP VS OLAP?

Answer - Online analytical processing (OLAP) is a category of software tools that analyse data stored in database, whereas online transaction processing (OLTP) supports transaction-oriented application in a 3-tier architecture.

OLAP creates a single platform for all type of business analysis needs which includes planning, budgeting, forecasting and analysis while OLTP is useful for administering day to day transaction of an organisation

OLAP is characterised by large volume of data, while OLTP is characterised by large number of short online transaction.

Question 13 – What are the various characteristics of data-warehouse?

- Subject oriented – A data warehouse typically provides information on a topic (such as sales inventory and supply chain) rather than company operations.
- Time variant - The time variant keys (e.g. for the date, month, time) are typically present.
- Integrated – A data- warehouse combine data from various sources. This may include a cloud, relational databases, flat files, structured and semi structured data, metadata and master data. The sources are combined in a manner that's consistent, relatable and ideally certifiable, providing a business with confidence in the data's quality.
- Persistent and non-volatile – Prior data isn't deleted when new data is added. Historical data is preserved for comparisons, trends and analytics.

Question 14- What is Star-Schema??

Answer - A star schema is a database organisational 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. It is called star schema because the fact table sits at the centre of the logical diagram, and the small dimensional tables branch off to form the points of the star.

Question 15 – What do you mean by SETL?

Answer - SETL is a high-level programming language based on the mathematical theory of sets. SETL provides two basic aggregate data types: unordered sets and sequence (the latter also known as tuples). The elements of sets and tuples can be of any arbitrary type, including sets and tuple itself