WORKSHEET 7 SQL

Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.

1. The primary key is selected from the
   A. Composite keys
   B. Candidate keys
   C. Foreign keys
   D. Determinants

   ANS: B
2. Which is/are correct statements about primary key of a table?
   A. Primary keys can contain NULL values.
   B. Primary keys cannot contain NULL values**…**
   C. A table can have only one primary key with single or multiple fields….
   D. A table can have multiple primary keys with single or multiple fields.
   ANS: B and C

Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.

3. Which SQL command is used to insert a row in a table?
   A. Select
   B. Create
   C. Insert
   D. Drop

   ANS: C
4. Which one of the following sorts rows in SQL?
   A. SORTBY
   B. ALIGNBY
   C. ORDERBY
   D. GROUPBY
   ANS: C
5. The SQL statement that queries or reads data from a table is
   A. QUERY
   B. READ
   C. SELECT
   D. QUERY

   ANS: C
6. Which normal form is considered adequate for relational database design?
   A. 1NF
   B. 2NF
   C. 3NF
   D. 4NF

   ANS: C

7. SQL can be used to
   A. Create database structures only
   B. Modify database data only
   C. All of the above can be done by SQL
   D. Query database data only

   ANS: C
8. SQL query and modification commands make up
   A. DDL
   B. DML
   C. HTML
   D. XML

   ANS: D
9. The result of a SQL SELECT statement is a(n).
   A. File
   B. Table
   C. Report
   D. Form

   ANS: B
10. Second normal form should meet all the rules for
   A. 1 NF
   B. 2 NF
   C. 3 NF
   D. 4 NF

   ANS: A

Q11 to Q15 are subjective answer type questions, Answer them briefly.

11. What are joins in SQL?

    A JOIN clause is used to combine rows from two or more tables, based on a related column between them.

    The purpose of JOINs in SQL is to access data from multiple tables based on logical relationships between them. JOINS are used to fetch data from database tables and represent the result dataset as a separate table.
    When a database programmer wants to do a join command, they will type about the databases they want to get information from, and the type of join they want to use.

12. What are the different types of joins in SQL?

    (INNER) JOIN: Returns records that have matching values in both tables

    LEFT (OUTER) JOIN: Returns all records from the left table, and the matched records from the right table

    RIGHT (OUTER) JOIN: Returns all records from the right table, and the matched records

from the left table

FULL (OUTER) JOIN: Returns all records when there is a match in either left or right table

13. What is SQL Server?

SQL Server is an application software for Relational Database Management System (RDBMS), from Microsoft, that can be used for creating, maintaining, managing, and implementing the RDBMS systems. It is an extensively used application as it enables multiple users simultaneously to work on the database systems, where users can range from minor office-based machines to huge Internet-based servers. Provisions any variety of SQL programming extending from ANSI SQL (for traditional SQL) through SQL to T-SQL (Transact-SQL) used for advanced relational databases.

It is the relational database management system developed by Microsoft back in 1988. It is actually a backend application that allows us to store and process data. In simple terms, it offers us a platform where we can update, change, and manage the data. It is called the relational database management system due to its nature to store the data in tables where the tables store the data about the same entity.

14. What is primary key in SQL?

A primary key is a field in a table which uniquely identifies each row/record in a database table.
Primary keys must contain unique values. A primary key column cannot have NULL values.

A table can have only one primary key, which may consist of single or multiple fields. When multiple fields are used as a primary key, they are called a composite key.

If a table has a primary key defined on any field(s), then you cannot have two records having the same value of that field(s).

15. What is ETL in SQL?

ETL stands for Extract, Transform and Load, which is a process used to collect data from various sources, transform the data depending on business rules/needs and load the data into a destination database. The need to use ETL arises from the fact that in modern computing business data resides in multiple locations and in many incompatible formats. For example business data might be stored on the file system in various formats (Word docs, PDF, spreadsheets, plain text, etc), or can be stored as email files, or can be kept in a various database servers like MS SQL Server, Oracle and MySQL for example. Handling all this business information efficiently is a great challenge and ETL plays an important role in solving this problem.