

**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
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.

**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
4. Which one of the following sorts rows in SQL?
  - A. SORTBY
  - B. ALIGNBY
  - C. ORDERBY**
  - D. GROUPBY
5. The SQL statement that queries or reads data from a table is
  - A. QUERY
  - B. READ
  - C. SELECT**
  - D. QUERY
6. Which normal form is considered adequate for relational database design?
  - A. 1NF**
  - B. 2NF
  - C. 3NF
  - D. 4NF
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

8. SQL query and modification commands make up
  - A. DDL
  - B. DML**
  - C. HTML
  - D. XML
9. The result of a SQL SELECT statement is a(n).
  - A. File
  - B. Table**
  - C. Report
  - D. Form
10. Second normal form should meet all the rules for
  - A. 1 NF
  - B. 2 NF**
  - C. 3 NF
  - D. 4 NF

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

11. What are joins in SQL?
12. What are the different types of joins in SQL?
13. What is SQL Server?
14. What is primary key in SQL?
15. What is ETL in SQL?

#### **11. What are joins in SQL?**

Joins in SQL are used to combine rows from two or more tables based on a related column between them. The related column is called a join condition and is used to match rows between the tables. Joins are used to retrieve data that is stored across multiple tables in a database. There are several types of joins in SQL, including inner join, left join, right join, and full outer join. Each type of join has its own specific syntax and usage. Joining tables in SQL allows for more complex queries and analysis of data.

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

There are several types of joins in SQL, including:

**Inner join:** Returns only the matching rows from both tables based on a specified condition.

**Left outer join:** Returns all the rows from the left table and matching rows from the right table based on a specified condition. If there are no matching rows in the right table, NULL values are returned.

**Right outer join:** Returns all the rows from the right table and matching rows from the left table based on a specified condition. If there are no matching rows in the left table, NULL values are returned.

**Full outer join:** Returns all the rows from both tables and matching rows based on a specified condition. If there are no matching rows in one of the tables, NULL values are returned.

**Cross join:** Returns the Cartesian product of the two tables, which means all possible combinations of rows are returned.

**Self join:** A join that is used to combine a table with itself.

Each type of join is used to retrieve data from two or more tables in a specific way, depending on the requirements of the query.

### 13. What is SQL Server?

SQL Server is a relational database management system (RDBMS) developed by Microsoft. It is used to store and manage data as well as to provide security and access controls to the data. SQL Server supports a wide range of programming languages and data access technologies, making it a popular choice for developing enterprise-level applications. It also includes features such as support for XML data, spatial data, and advanced analytics.

### 14. What is primary key in SQL?

In SQL, a primary key is a column or a set of columns in a table that uniquely identifies each row of that table. It must contain unique values and cannot contain null values. A primary key is used to enforce data integrity in a table and to ensure that each row can be uniquely identified. When a table has a primary key, it can be referenced by other tables in the database, creating relationships between tables. In SQL, the primary key is defined using the PRIMARY KEY constraint.

### 15. What is ETL in SQL?

**ETL stands for Extract, Transform, and Load.** It refers to the process of extracting data from various sources, transforming the data into a format that is suitable for analysis, and then loading the data into a target system such as a data warehouse. ETL is an important part of data integration, which involves combining data from various sources and preparing it for analysis. SQL is often used in the ETL process to transform the data and load it into the target system.

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