

SQL Worksheet – 7

Ans. 1) a, b

Ans. 2) b, c

Ans. 3) c

Ans. 4) c

Ans. 5) c

Ans. 6) c

Ans. 7) c

Ans. 8) b

Ans. 9) b

Ans. 10) a

Ans. 11) A SQL Join statement is used to combine data or rows from two or more tables based on a common field between them. For Example :

```
SELECT Orders.OrderID, Customers.CustomerName, Orders.OrderDate FROM  
Orders INNER JOIN Customers ON Orders.CustomerID=Customers.CustomerID;
```

Ans. 12) The different types of joins in SQL are as follows :

- I. **INNER JOIN:** The INNER JOIN keyword selects all rows from both the tables as long as the condition satisfies. This keyword will create the result-set by combining all rows from both the tables where the condition satisfies i.e. value of the common field will be same.
- II. **LEFT JOIN:** This join returns all the rows of the table on the left side of the join and matching rows for the table on the right side of join. The rows for which there is no matching row on right side, the result-set will contain null.
- III. **RIGHT JOIN:** RIGHT JOIN is similar to LEFT JOIN. This join returns all the rows of the table on the right side of the join and matching rows for the table on the left side of join. The rows for which there is no matching row on left side, the result set will contain null. RIGHT JOIN is also known as RIGHT OUTER JOIN.

IV. **FULL JOIN:** FULL JOIN creates the result-set by combining result of both LEFT JOIN and RIGHT JOIN. The result-set will contain all the rows from both the tables. The rows for which there is no matching, the result-set will contain NULL values.

Ans. 13) SQL SERVER is a relational database management system (RDBMS) developed by Microsoft. It is primarily designed and developed to compete with MySQL and Oracle database.

Ans. 14) The PRIMARY KEY constraint uniquely identifies each record in a table. Primary keys must contain UNIQUE values, and cannot contain NULL values. A table can have only ONE primary key; and in the table, this primary key can consist of single or multiple columns (fields).

Ans. 15) 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.