Assignment [Module 3]

Question 1:

What is RDBMS

Answer:

A relational Database management system (RDBMS) is a collection of programs and capabilities that enable IT teams and others to create, update, administer and otherwise interact with a relational database. RDBMSes store data in the form of tables, with most commercial relational database management systems using Structured Query Language (SQL) to access the database. However, since SQL was invented after the initial development of the relational model, it is not necessary for RDBMS use.

The RDBMS is the most popular database system among organizations across the world. It provides a dependable method of storing and retrieving large amounts of data while offering a combination of system performance and ease of implementation.

Question 2:

What is SQL:

Answer:

* SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.
* SQL is the standard language for Relation Database System. All relational database management systems like MySQL, MS Access, Oracle, Sybase, Informix, postgres and SQL Server use SQL as standard database language.
* Also, they are using different dialects, such as :

MS SQL Server using T-SQL, ANSI SQL

Oracle using PL/SQL,

MS Access version of SQL is called JET SQL (native format) etc.

Question 3:

Write SQL commands

Answer:

1. Select:

Select command is used to retrieve data from the databse

SELECT \* FROM table\_name;

1. Insert into:

Add new records or raw to a table

INSERT INTO table\_name (column1, column2, column3, ...)

VALUES (value1, value2, value3, ...);

1. Update:

Modifies existing records in table

UPDATE table\_name

SET column1 = value1, column2 = value2, ...

WHERE condition;

1. Delete:

Removes records from the table

DELETE FROM table\_name WHERE condition;

1. Create table:

Creates a new table in the database

CREATE TABLE table\_name (

column1 datatype,

column2 datatype,

column3 datatype,

....

);

1. Alter table:

Modifies an existing table structure

ALTER TABLE table\_name

ADD column\_name datatype;

1. Drop table:

Deletes table and its data

DROP TABLE table\_name;

Question 4:

What is join?

Answer:

The primary purpose of a SQL JOIN is to combine data from multiple tables so that you can work with them as a single table. This is particularly useful in relational databases, where data is often distributed across various tables.

For instance, consider a scenario where one table contains customer information and another holds order details. Using JOIN, these tables can be combined to see which customers placed which orders, simplifying the process of complex data queries.

Question 5:

Write types of joins

Answer: