**DATA BASE ASSIGNMENT**

**QUE -1 ) What do you understand By Database**

* A database is an organized collection of structured information, or data, typically stored electronically in a computer system.

**QUE -2) What is Normalization?**

* Normalization is the process of organizing data in a database. It include creating tables and establishing relectionship between those table
* Normalization is the process where a database is designed in a way that removes

redundancies, and increases the clarity in organizing data in a database.

* Through normalization, the collection of data in single table will be distributed
* over several tables with specific relationship between them.

**QUE-3) What is Difference between DBMS and RDBMS?**

* DBMS:- Satnd for Data base Management System
* DBMS Stores data as file.
* No relationship between data.
* Normalization is not present.
* RDBMS:- Stand for Relational Database Management System
* RDBMS stores data in tabular form.
* Data is stored in the form of tables which are related to each other.
* Normalization is present.

**QUE-4) What is MF Cod Rule of RDBMS Systems?**

* Codd’s rules are proposed by a computer scientist named Dr. Edgar F. Codd and he also invent the relational model for database management. These rules are made to ensure data integrity, consistency, and usability.
* **The Information Rule:** All information, whether it is user information or metadata, that is stored in a database must be entered as a value in a cell of a table. It is said that everything within the database is organized in a table layout.
* **The Guaranteed Access Rule:** Each data element is guaranteed to be accessible logically with a combination of the table name, primary key (row value), and attribute name (column value).
* **Systematic Treatment of NULL Values**: Every Null value in a database must be given a systematic and uniform treatment.
* **Active Online Catalog Rule**: The database catalog, which contains metadata about the database, must be stored and accessed using the same relational database management system.
* **The Comprehensive Data Sublanguage Rule**:A crucial component of any efficient database system is its ability to offer an easily understandable data manipulation language (DML) that facilitates defining, querying, and modifying information within the database.
* **The View Updating Rule**: All views that are theoretically updatable must also be updatable by the system.
* **High-level Insert, Update, and Delete**: A successful database system must possess the feature of facilitating high-level insertions, updates, and deletions that can grant users the ability to conduct these operations with ease through a single query.
* **Physical Data Independence**: Application programs and activities should remain unaffected when changes are made to the physical storage structures or methods.
* **Logical Data Independence** : Application programs and activities should remain unaffected when changes are made to the logical structure of the data, such as adding or modifying tables.
* **Integrity Independence**: Integrity constraints should be specified separately from application programs and stored in the catalog. They should be automatically enforced by the database system.
* **Distribution Independence**: The distribution of data across multiple locations should be invisible to users, and the database system should handle the distribution transparently.
* **Non-Subversion Rule**: If the interface of the system is providing access to low-level records, then the interface must not be able to damage the system and bypass security and integrity constraints.

**QUE – 5) What do you understand By Data Redundancy?**

* Data redundancy occurs when the same piece of data exists in multiple places,

**QUE -6) What is DDL Interpreter?**

**DDL:-** Stand for data definition language.

* DDL commands include CREATE, ALTER, DROP, and TRUNCATE.
* It is used to define structure of database and tables.
* Interpreter perform line by lin code.

**QUE -7) What is DML Compiler in SQL?**

* DML Stand for data manuplete language
* DML commands include SELECT, INSERT, UPDATE, DELETE.
* DML is used to manipulate the data itself within the database.
* Compiler compile hole code.

**QUE-8) What is SQL Key Constraints writing an Example of SQL Key Constraints**

* The primary key constraint uniquely identifies each record in a table . primary keys must contain unique value and cannot contain null values

**QUE – 9) What is save Point? How to create a save Point write a Query?**

* Savepoint is a command in SQL that is used with the rollback command.
* It is a command in Transaction Control Language that is used to mark the transaction in a table.
* Syntax:- SAVEPOINT savepoint\_name;

**QUE -10) What is trigger and how to create a Trigger in SQL?**

* Trigger is a statement that a system executes automatically when there is any modification to the database.
* A trigger is Sql store procedure that automatically execute in responce to a specific event such as insert,update,delete or Truncate statement on a specificed table or view
* Syntax:- CREATE TRIGGER [schema\_name.]trigger\_name

ON table\_name

AFTER {[INSERT], [UPDATE], [DELETE]}

[NOT FOR REPLICATION]

AS {sql\_statements};