**SQL**

**Data:** Data is a raw fact which describes the attributes of an entity.

**Database:** Database is a medium where we can store the data in systematic and organized manner.

**Basic operations done on a Database**

* CREATE/INSERT
* READ/RETRIEVE
* UPDATE/MODIFY
* DELETE/DROP

These operations are referred as **‘CRUD’** operations.

**Database Management System (DBMS) :** DBMS is a software which is used to maintain and manage the database.

**Manage the database**

* We use query language to communicate/interact with DBMS.
* Security and Authorization are the 2 important features provided by DBMS.

**Entity:** It is a substance, which has its existence in real world.

Eg: Student

**Attribute:** The properties which describes an entity.

Eg: Sid, Sname, age etc…

**Relational Database Management System (RDBMS)**

* RDBMS is a type of DBMS software which is used to store the data in the form of Relations (tables).

OR

* Any DBMS that follows Relational model is known as RDBMS.
* We use SQL to communicate with RDBMS.

**Relational Model**

* Relational model was designed by **E.F Codd.**
* Relational model is used to arrange the data in the form of

relations/tables including metadata (Data about data).

**Assignment**

1. List out the difference between Database and DBMS.
2. List out the difference between DBMS and RDBMS.
3. List out the difference between RDBMS and Relational model.

**Table:**

* Table is a collection of rows and columns.
* Table is also called as an entity.

**Column:** column is also called as an attribute/field.

**Row:** Row is also called as a record/tuples.

**Cell:** Cell is the intersection of row and column.