

## **Normalization:**

The normalization process is used by database developers to design databases in which it is easy to organize and manage data while ensuring the accuracy of data throughout the database. Normalization is used to a set of relations while ensuring data integrity and eliminating data redundancy.

- Data integrity: All of the data in the database are consistent, and satisfy all integrity constraints.
- Data redundancy: If data in the database can be found in two different locations (direct redundancy) or if data can be calculated from other data items (indirect redundancy) then the data is said to contain redundancy.

Normal form is a way of measuring the levels, or depth, to which a database has been normalized. A database's level of normalization is determined by the normal form. The commonly Normal form are:

1. First Normal Form (1NF)
2. Second Normal Form (2NF)
3. Third Normal Form (3NF)
4. Boyce-Codd Normal Form (BCNF)