**NORMALIZATION**

Normalization is the process of organizing data in a database. It performed to reduce the data redundancy in a database and ensure that data is stored logically. Normalization is multi-step process that puts data in tabular form and remove duplicate data from relation tables.

1. **Insertion Anomaly**

An insertion anomaly occurs in the relation database when some data items are inserted into database without existance of other data.

1. **Updation Anomaly**

Updation anomaly occurs when the same data item are repeates with the same values are not linked to each other.

1. **Deletion Anomaly**

Deletion anomaly occurs when deleting one part of the data deletes the other necessary information from the database.

Types of Normalization

1. **1 NF (First Normal Form) :-**

In 1 NF relation each table cell should contain a single value. Each record looks like unique. 1 NF wants to store unique information in table without data repeatation.

1. **2 NF (Second Normal Form) :-**

Records shouldn’t depend on anything other than a tables’s primary key. In the second normal form, all non-key attributes are fully dependant on the primary key.

1. **3 NF (Third Normal Form) :-**

Eliminate fields that don’t depend on the key. Values in a record that aren’t part of that record’s key don’t belong in the table.