Anomalies in MySQL

Anomalies -- It is a abnormal condition or defect in database.

Anomalies are caused when there is too much redundancy in the database's information. Anomalies can often be caused when the tables that make up the database suffer from poor construction. So, what does "poor construction" mean? Poor table design will become evident if, when the designer creates the database, he doesn't identify the entities that depend on each other for existence, like the rooms of a hotel and the hotel, and then minimize the chance that one would ever exist independent of the other.

The normalization process was created largely in order to reduce the negative effects of creating tables that will introduce anomalies into the database.

There are three types of **Data Anomalies**: Insertion Anomalies, Update Anomalies and Deletion Anomalies.

- (1.) Insertion Anomalies -- Insertion anomaly accour when we have information for only one attribute in table and we dont have information regarding other attributes then we have to provide null values to those attributes which will create this anomaly in table.
- (2.) Update Anomalies -- Updation anomaly occur when we try to update a row in a table using non-prime attribute which also exist in another table so whenever trying to update a single row, other rows in the table are also affection and this creates a anomaly.
- (3.) Deletion Anomalies -- **Deletion Anomalies** happen when the deletion of unwanted information causes desired information to be deleted as well.