**ACD\_Session10\_Assignment4**

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| Assignment : |
| Define Normalization |
| Enlist the advantages of normalizing database |
| Define Denormalization |
| Define DDL and DML |
| Enlist some commands of DDL |

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# Database Concepts

## 1. Define Normalization

Organized data void of inconsistent dependency and redundancy within a database is called normalization.

Process of organizing the [columns](https://en.wikipedia.org/wiki/Column_(database)) (attributes) and [tables](https://en.wikipedia.org/wiki/Table_(database)) (relations) of a [relational database](https://en.wikipedia.org/wiki/Relational_database) to minimize [data redundancy](https://en.wikipedia.org/wiki/Data_redundancy).

## 2. Enlist the advantages of normalizing database

* Eliminate Duplicate Entries
* Saves Storage space
* Optimize Query Performance

## 3. Define Denormalization

Optimizing database performance, adding of redundant data which in turn helps rid of complex data is called denormalization.

Process of attempting to optimize the read performance of a [database](https://en.wikipedia.org/wiki/Database) by adding redundant data or by grouping data

## 4. Define DDL and DML

* Data Definition Language (DDL) – Managing the properties and attributes of the Database
* Data Manipulation Language (DML) - Manipulating Data in the Database:
  + Insert
  + Update
  + Delete

## 5. Enlist some commands of DDL

* Create Tables
* Alter Tables
* Drop Tables