

## Data Warehousing & ETL Concepts

<b>1</b>	<b>Database Design</b>
	Normalization
	De-Normalization
	Examples
<b>2</b>	<b>Data-warehouse Introduction</b>
	Define Data-warehouse
	Data Warehouse Architecture
	The Top-Down Approach
	The Bottom-up Approach
	Differences between OLAP & OLTP
	<b>OLAP</b>
	OLAP Architecture
	OLAP Servers
	- R OLAP Server
	- M OLAP Server
	- H OLAP Server
	OLAP Operations
	- Roll up Operation
	- Drill down Operation
	- Slice Operation
	- Dice Operation
	- Pivot Operation
	<b>Types of Data Warehouse</b>
	- Enterprise Data Warehouse
	- Data Marts
	- Dependent Data Mart
	- In-dependent Data Mart
	- ODS (Operational Data Store)
<b>3</b>	<b>Data Models</b>
	Conceptual Data Model
	Logical Data Model
	Physical Data Model
	Comparisons of CDM, LDM & PDM
	Pictorial Representation of these models

<b>4</b>	<b>Dimensional Modeling</b>
	Dimension & Facts
	Attributes, Hierarchy
	Star Schema Architecture
	Snow-Flake Schema
	Pictorial Representation of Star & Snow Flake schemas
	Types of Dimensions
	Types of Facts
	Types of Fact Tables
	Slowly Changing Dimensions [SCD] & their types

<b>5</b>	<b>Data Acquisition</b>
	Define Data Acquisition [ETL]
	Steps in ETL
	ETL Architecture
	ETL tools
	Sources v/s Targets