**Assignment 1**

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**Topic**: Data basics

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1.Explain the concept of data ware housing that learnt from today’s class?

Solution:

* Data warehousing is the efficient way to analyse the data

Definition:

Data warehouse is subject oriented,integrated,time variant and non-volatile collection of data in support of management’s system.

Features of Data Ware house:-

1.Subject Oriented

* Subject-oriented Data are organized according to the subject instead of application.
* It mainly focus on two things

1.modeling the data

2.analysing the data

2.Integrated

* It integrates different types of data sources like we have relational databases,flat files,online transaction records etc

3.Time-varient

* It provides the data information for the past five years like for example we take amazon website it collects data for our orders for past few years and give that type of suggestions

4.Non volatile

* Once the data is entered into the data warehouse then it is in static form only
* There are no updates or else we cannot delete the data once the data is entered to data ware house.

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* Actually in data ware house the data which is coming as in the form of raw data, like generally the input is OLTP or Operational Data base.
* OLTP means online transaction processing is a methodology to provide end users with access to large amount of data
* Then within the data ware house it integrated the raw data and store the data for various analytical purposes and decision making purposes
* The data which is stored in data ware house in the form of data marts
* Then this is transmit to the OLAP which is online analytical processing approach
* OLAP server receives the data from data ware house by which representing the data in a user understandable way
* OLAP server mainly classifies into two types

1.ROLAP

2.MOLAP

* ROLAP performs dynamic multi-dimensional analysis of data stored in relational data base
* MOLAP helps the user to slice and dice the data and provide multi-dimensional analysis by putting data into cube structures

Applications of data ware housing:

1.Information processing:

* It supports querying and basic statistical analysis

2.Analytical processing:

* Multi-dimensional analysis of ware house data
* Supports slicing and dicing

3.Data mining

* Supports constructional analytical using visualization tools