TY B.Tech. (CSE) – II [2022-23]
5CS372 : Advanced Database System Lab.
Assignment No. 6

PRN: 2020BTECS00033
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Title: To design and implement a data warehouse for a customer order processing system in a company.

Objective/Aim:

- To understand & design data Warehouse.

Introduction:

1. To meet user requirements, the objective of this project is to design and implement a data warehouse system for a customer order processing system in a company that consists of multiple stores located in different cities and states.
2. The data warehouse system will extract data from the existing operational databases and provide online analytical processing with roll-up, drill-down, slice, and dice features.
3. The data warehouse system will enable users to find stores that hold a particular item of stock, fulfil orders, analyse items ordered by customers, track stock levels of items in stores, and handle other related queries.
4. Using the star schema methodology, the data warehouse system will be designed with a fact table and dimension tables.
5. The fact table will contain data related to orders, while the dimension tables will store data related to customers, stores, items, and time.

Procedure:

The queries for above questions are available on the GitHub link provided below.

https://github.com/prathameshraje23/ADSL-Assignment-6.git

Observations:

1. The data warehouse system will ensure data accuracy and completeness through data verification.
2. OLAP reports generated by the system will provide insights into customer orders, store performance, and item availability, among others.

Conclusion:

1. By implementing a data warehouse system for a customer order processing system, the company can provide users with a powerful tool for analysing and understanding data stored in operational databases.
2. The data warehouse system offers fast and efficient processing of OLAP queries, enabling users to access data quickly and make informed business decisions with ease.