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Roll no :- 19

## Experiment No :- 01

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Experiment No-01

Date :

Title :- Implementation of star schema

Problem statement :- The university wants to design star schema to record grade for course completed by the student. There are four dimensional table namely course section, student, professor, lecture with the attributes as follows.

Course section = course\_id, sec.No, course\_name, units, room id, Room capacity, pro  
professor = prof id, prof name, Dept id, Dept name  
student = stud id, prof name, Dept id, Dept name  
lecture = sem id, year, class

Theory & Concept :-

Multidimensional schema is especially designed to model data warehouse system, the schema are designed to address the unique need of very large database designed for the analytical purpose (OLAP).

- Star schemas
- snowflake schema
- Galaxy schema

Star schema :-

- Each dimension in a star schema is represented with only one-dimension table
- The dimension table contains the set of attributes
- The diagrams show the sales data of a company with respect to the four dimension namely time, item branch & location.

### Characteristics of Snowflake Schema

- The main benefits of the snowflake schema it uses smaller disk space.
- Due to implement a query performance is reduced.

### Characteristics of Galaxy Schema:-

- The dimension in this schema are separated into separate dimensions based on the various level hierarchy.
- The dimension table give: Dimensional table which is need to build based on level of hierarchy.
- Moreover, it is possible to build this type of schema by splitting the one star schema into more star schema.

### Conclusion:-

Hence we studied all schemas in data warehouse and implemented star schema for above problem.

OUTPUT :



