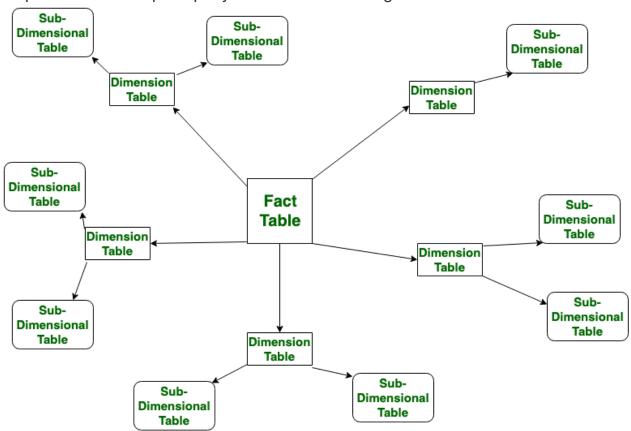
## Difference between Snowflake Schema and Fact Constellation Schema

<u>Snowflake Schema</u>: Snowflake Schema is a type of multidimensional model. It is used for data warehouse. In snowflake schema contains the fact table, dimension tables and one or more than tables for each dimension table. Snowflake schema is a normalized form of star schema which reduce the redundancy and saves the significant storage. It is easy to operate because it has less number of joins between the tables and in this simple and less complex query is used for accessing the data from database.



## **Advantages:**

**Reduced data redundancy:** The snowflake schema reduces data redundancy by normalizing dimensions into multiple tables, resulting in a more efficient use of storage space.

**Improved performance:** The snowflake schema can improve query performance, as it requires fewer joins to retrieve data from the fact table.

**Scalability:** The snowflake schema is scalable, making it suitable for large data warehousing projects with complex hierarchies.

## **Disadvantages:**

**Increased complexity:** The snowflake schema can be more complex to implement and maintain due to the additional tables needed for the normalized dimensions.

**Reduced query performance:** The increased complexity of the snowflake schema can result in reduced query performance, particularly for queries that require data from multiple dimensions.

**Data integrity:** The snowflake schema can be more difficult to maintain data integrity due to the additional relationships between tables.

Fact Constellation Schema: The fact constellation schema is also a type of multidimensional model. The fact constellation schema consists of dimension tables that are shared by several fact tables. The fact constellation schema consists of more than one star schema at a time. Unlike the snowflake schema, the planetarium schema is not really easy to operate, as it has multiple numbers between tables. Unlike the snowflake schema, the constellation schema, in fact, uses heavily complex queries to access data from the database.

Let's see the difference between Snowflake Schema and Fact Constellation Schema:

S.NO	Snowflake Schema	Fact Constellation
	Snowflake schema contains the large	While in fact constellation schema,
1.	central fact table, dimension tables and	dimension tables are shared by many
	sub dimension tables.	fact tables.
2.	Snowflake schema saves significant	While fact constellation schema does not
	storage.	save storage.
3.	The snowflake schema consists of one star schema at a time.	Whereas the fact constellation schema
		consists of more than one star schema at
		a time.
4.	In snowflake schema, tables can be	In fact constellation schema, the tables
	maintained easily.	are tough to maintain.
5.	Snowflake schema is a normalized form of star schema.	While fact constellation schema is a
		normalized form of snowflake schema
		and star schema.
	Snowflake schema is easy to operate	Fact constellation schema is not easy to