

Data Modelling:-

Normalization :- It is the process of splitting the database into multiple tables so that we can reduce redundancy and improve data integrity.

→ In Power BI, fact and dimension tables are two types of tables use to built the data model.

Fact :- Fact tables will have measurable or quantitative data / Numerical.

Dimension :- Dimension table will contain unique categorical data.

Data Model creation:-

Cardinality is the relationship between two tables in the data model.

It is defined by 4 types :-

- One-to-one
- One-to-many
- many-to-one
- Many-to-many.

Why Data modelling?

- To remove unnecessary columns and rows.
- To perform Group by and summarize.
- Optimize column and data types
- Use Custom columns.

Schema:-

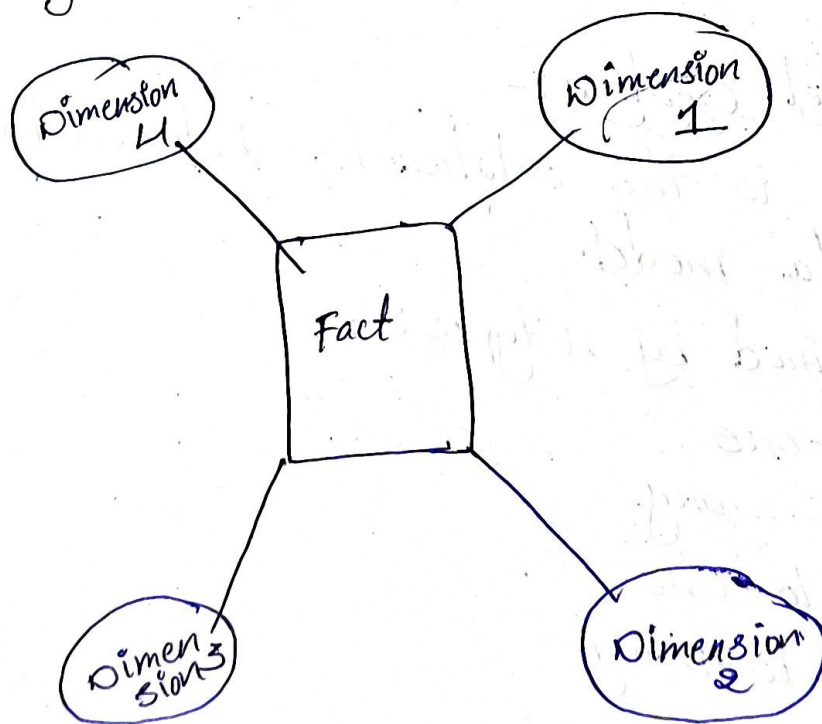
It is the structure of data model that defines how data is connected and organized.

There are 3 types:-

- Star schema
- Snowflake schema
- Galaxy Schema.

Star Schema:-

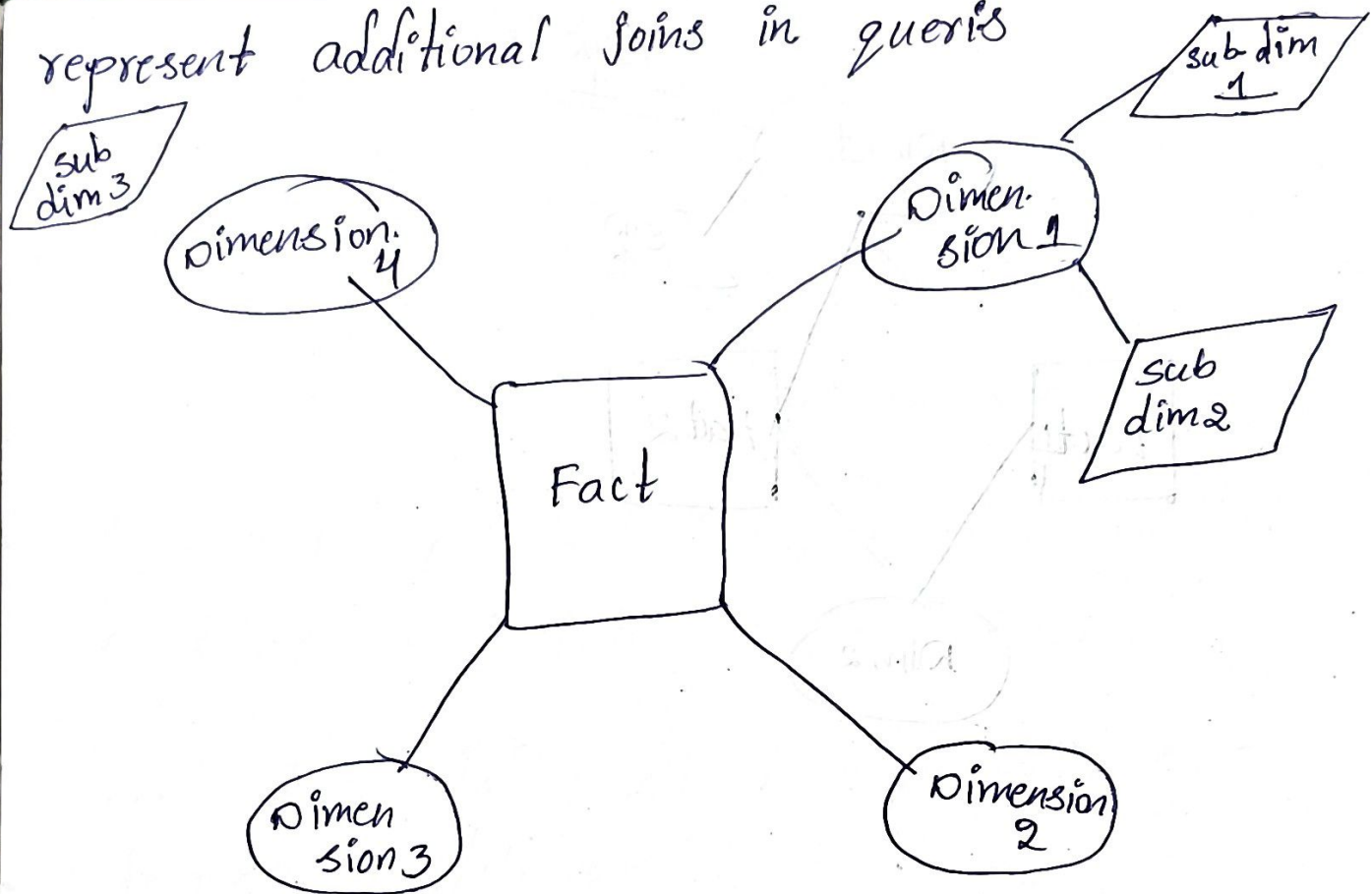
- One fact table to this will connect all dimension table
- Dimension table in a star schema align with fact giving it a star shape.



Snowflake Schema:-

- Dimension table have sub-division table.
- snowflake schema use sub-divisions to represent

represent additional joins in queries



sub Dim 4

→ It is not compulsory ^{that} all the dimensions should have sub-dimensions.

Galaxy Schema:-

This schema contains more than one fact table linked to dimension tables.

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sub dim

