Dimension Table:

In data warehouse we store the data in two forms 1. Dimension table 2. Fact table.

Dimension Table:

- It is detail descriptive data about the business.
- It contains Primary Key (PK)
- It contains Texture data

Types of Dimension Table

1. SCD (Slowly Changing Dimension)

2. Conformed Dimension Table

3. Junk Dimension Table

4. Degenerative Dimension Table

5. Role-play Dimension Table

1. SCD (Slowly Changing Dimension)

The values or data's of the table are changes over a long period hence we call as slowly changing dimension.

There three types of SCD

a. SCD1, b. SCD2, c. SCD3

a. **SCD type 1:** In which we can maintain only current data. This can be achieved by overwrite on old data.

b. **SCD type 2:** In which we can maintain current and all or complete historical data. This can be achieved by inserting as new row.

c. **SCD type 3:** In which we can maintain current and partial historical data. This can be achieved by inserting as pair of attribute.

2. Conformed Dimension Table

It is the dimension table that can be shared by multiple fact tables. **Or**

The dimension table which is having same meaning to all fact tables.

Ex: Time dimension Table (Dim_time)

3. **Junk Dimension Table**

These are the unwanted data's attribute in a fact table. These are nothing but the collection oftransactional code flag which are not same as other dimension table.

EX:- Mode of Payment in which cash, Cheque, Credit

4. **Degenerative Dimension Table**

In which there is no physical separate dimension table available, but the key (PK) is available in facttable.

Ex: Purchase Order Number, Policy Number, Order Number

5. **Role-play Dimension Table**

A dimension table is having unique label for all business aspects in a same fact table. **or**

A dimension table rapidly used for all attributes with unique label.

Ex: Online Purchase in which the date dimension

Order date, payment date, packing date, shipping date and delivery date.

In above all attribute the date is unique (No duplicate) so that **time dimension table is a role-playdimension table.**

Fact Table:

- These are nothing but the fact or measures or summarized data about the business.
- It is having foreign key.
- It contains numeric values.

Types of Fact Table:

1. **Additive Fact Table:**

   - In which the fact value is generated by considering all dimension tables.
   - Ex: sales

2. **Semi – Additive Fact Table:**

   - In which fact value is generated by considering few dimension tables.
   - Ex: quantity in hand (balance quantity), bank balance.

3. **Non – Additive Fact Table:**

   - In which fact value is generated without considering any dimension table.
   - Ex: sales tax, unit price.

4. **Fact-Less Fact Table:**

   - It does not contain any fact or measure.
   - It contains foreign keys.