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Experiment 3

1. slicing operation

Analyze in detail sale of every product from Mumbai warehouse

```
mysql> select p.product_ID, p.name, p.cost, w.location from export_fact E, warehouse_dim W, item_dim p where E.E_ID_ID = W.W_ID_ID and E.product_ID = p.product_ID and W.location = 'Mumbai';
```

product_ID	name	cost	location
2	Tata AssamTea	270000	Mumbai
3	Tata GreenTea	90000	Mumbai
4	Tata BlackTea	170000	Mumbai

3 rows in set (0.01 sec)

2. dicing

Analyze in detail sale of Tata AssamTea from Mumbai warehouse

```
mysql> select p.product_ID, p.name, p.cost, w.location from export_fact E, warehouse_dim W, item_dim p where E.E_ID_ID = p.product_ID and E.W_ID_ID = W.W_ID_ID and W.location = 'Mumbai' and p.name = 'Tata AssamTea';
```

product_ID	name	cost	location
2	Tata AssamTea	270000	Mumbai

1 row in set (0.01 sec)

3. roll-up

Analyze location wise sales of each product

```
mysql> select w.location, p.name, avg(p.total_inst) as Total from warehouse_dim W, item_dim p, export_fact E where W.W_ID_ID = E.W_ID_ID and p.product_ID = E.product_ID group by W.location, p.name;
```

location	name	Total
Bombay	Tata BlackTea	175000.0000
Bombay	Tata GreenTea	450000.0000
Hyderabad	Tata AssamTea	100000.0000
Hyderabad	Tata GreenTea	700000.0000
Mumbai	Tata AssamTea	270000.0000
Mumbai	Tata GreenTea	450000.0000
Mumbai	Tata BlackTea	170000.0000
Pune	Tata BlackTea	100000.0000

8 rows in set (0.05 sec)

4. drill-down

Analyze the products sold each year.

```
mysql> select p.name, p.cost, t.year from export_fact E, time_dim t, item_dim p where E.product_ID = p.product_ID and E.time_ID = t.time_ID;
```

name	cost	year
Tata GreenTea	90000	2010
Tata GreenTea	90000	2014
Tata AssamTea	270000	2020
Tata GreenTea	90000	2020
Tata BlackTea	170000	2010
Tata GreenTea	90000	2020
Tata GreenTea	90000	2020
Tata GreenTea	90000	2018
Tata BlackTea	170000	2020
Tata BlackTea	170000	2020

10 rows in set (0.05 sec)