Project on analysis of Market schema by SQL

PROJECT FILE LINK:-market star shema full db

1. Need the full details of shipment so select Order ID, Ship ID, Shipping_Cost, Ship_date from the database.

Solution:-

```
select * from market_star_schema.shipping_dimen
```

2. Provide the customer name, city, state and the order ID and order quantity they ordered.

Solution:-

```
select cust_dimen.customer_Name, cust_dimen.City,
cust_dimen.State, market_fact_full.Ord_id,
market_fact_full.Order_Quantity
from cust_dimen INNER JOIN
market_fact_full ON cust_dimen.cust_id = market_fact_full.cust_id;
```

3. Provide the product details like order Id, shipment ID whose shipment mode is Regular air.

Solution:-

```
select shipping_dimen.Order_ID, shipping_dimen.Ship_Mode
from shipping_dimen where Ship_Mode = "regular air";
```

4. Provide all the details of customers which are from West Bengal.

Solution:-

```
select * from cust_dimen where State = "West Bengal";
```

5. Provide the order details like odr_id, prod_id, ship_id, cust_id whose discount is more than 0.05 and order_quantity is more than 10.

Solution:-

```
select prod_id, ship_id, cust_id from market_fact_full
```

where Discount > 0.05 and Order_Quantity > 10;

6. Create a table shipping_mode_dimen having columns with their respective data types as the following:-

(i) Ship_Mode VARCHAR(25)
(ii) Vehicle_Company VARCHAR(25)
(iii) Toll_Required BOOLEAN

Solution:-

```
CREATE TABLE `shipping_mode_dimen` (
  `Ship_Mode` varchar(25) DEFAULT NULL,
  `Vehicle_Company` varchar(25) DEFAULT NULL,
  `Toll_Required` Boolean
);
```

7. Make 'Ship_Mode' as the primary key in the above table.

Solution:-

```
CREATE TABLE `shipping_mode_dimen` (
  `Ship_Mode` varchar(25) NOT NULL,
  `Vehicle_Company` varchar(25) DEFAULT NULL,
  `Toll_Required` Boolean,
  PRIMARY KEY (`Ship_Mode`)
);
```

8. Add another column named 'Vehicle_Number' and its data type to the created table.

Solution:-

```
alter table shipping_mode_dimen
ADD Vehicle_Number varchar(20);
```

9. Update its value to 'MH-05-R1234'.

Solution:-

```
update shipping_mode_dimen
set vehicle_Number = 'MH-05-R1234';
```

10. Print the names of all customers who are either corporate or belong to Mumbai.

Solution:-

```
select * from cust_dimen where City= 'Mumbai' or
Customer_Segment='CORPORATE';
```

11. Find the total number of sales made.

Solution:-

```
select count(Sales) from market_fact_full;
```

12. List the customer names in alphabetical order.

Solution:-

```
select Customer_Name from cust_dimen order by
Customer_Name ASC;
```

13. Print the three most ordered products.

Solution:-

```
Select Prod_id, count(Order_Quantity) from market_fact_full
group by
Prod_id order by count(Order_Quantity) desc limit 3;
```

14. Which month and year combination saw the most number of critical orders?

Solution:-

```
select * from orders_dimen where Order_Priority = 'CRITICAL'
order by Order_Number desc limit 1;
```

15. Find the most commonly used mode of shipment in 2011.

Solution:-

```
select Ship_Mode, count(Order_ID) from shipping_dimen WHERE
YEAR(Ship_Date)='2011'
group by Ship_Mode order by count(Ship_Mode) desc limit 1;
```

16. Find all low-priority orders made in the month of April. Out of them, how many were made in
the first half of the month?

Solution:-

```
select * from orders_dimen where Order_Priority= 'LOW' and
MONTH(Order_Date)= '04';

select * from orders_dimen where Order_Priority= 'LOW' and
MONTH(Order_Date)= '04' and DAY(Order_Date) <= '15';
```

17. Rank the orders made by Aaron Smayling in the decreasing order of the resulting sales.

Solution:-

```
   select market_fact_full.Sales, cust_dimen.Customer_Name from
market_fact_full inner join
   cust_dimen on Customer_Name= 'Aaron Smayling'
   order by market_fact_full.Sales desc;
```

18. For the above customer, rank the orders in the increasing order of the discounts provided.
Also display the dense ranks.

Solution:-

```
   select cust_dimen.Customer_Name, market_fact_full.Discount,
    DENSE_RANK() OVER (ORDER BY market_fact_full.Discount
asc) AS DenseRank
    from market_fact_full inner join
   cust_dimen on Customer_Name= 'Aaron Smayling';
```

19. Rank the orders in the increasing order of the shipping costs for all orders placed by Aaron
Smayling. Also display the row number for each order.

Solution:-

```
select cust_dimen.Customer_Name,
market_fact_full.Shipping_Cost,
    ROW_NUMBER() OVER (ORDER BY
market_fact_full.Shipping_Cost asc) AS RowNumber
    from market_fact_full inner join
   cust_dimen on Customer_Name= 'Aaron Smayling';
```