

Sales and Delivery

Composite data of a business organization, confined to the 'sales and delivery' domain is given for the period of the last decade. From the given data retrieve solutions for the given scenario.

List of tables:

Cust_dimen:

| Column Name | Data type | Comments |
|------------------|-----------|--------------------------------|
| Customer_name | Varchar | Name of the customer |
| Province | Varchar | ID for Province |
| Region | Varchar | ID for Region |
| Customer_Segment | Varchar | Types of the customer segments |
| Cust_id | Varchar | Id to the customers |

Market Fact:

| Column Name | Data Types | Comments |
|---------------------|------------|--|
| Ord id | Varchar | Id for the Order |
| Prod id | Varchar | Id for the product |
| Ship id | Varchar | ID for the shipping |
| Cust id | Varchar | ID for the customer |
| Sales | Float | The sales price for the product |
| Discount | Float | Discount for the product |
| Order Quantity | Float | Number of products have been ordered |
| Profit | Float | Profit that has been gained from the product |
| Shipping cost | Float | Shipping cost for the product |
| Product Base Margin | Float | Base margin value for the product |

Orders_Dimen:

| Column Name | Data type | Description |
|----------------|-----------|--|
| Order id | integer | Id for the order |
| Order Date | date | The order date for that order has been ordered |
| Order Priority | varchar | Priority for the orders |
| Ord id | varchar | Order id as a varchar |

Prod_Dimen:

| Column Name | Data type | Description |
|----------------------|-----------|--------------------------|
| Product_Category | Varchar | Type of the product |
| Product_Sub_category | Varchar | Name of the sub-category |
| Prod_id | Varchar | Id of Product |

Shipping Dimen:

| Column Name | Data Type | Description |
|-------------|-----------|----------------------|
| Order_ID | | Id for the orders |
| Ship_Mode | | Type of the shipping |
| Ship_Date | | Shipping date |
| Ship_ID | Varchar | ID for the shipping |

Queries :

Question 1: Find the top 3 customers who have the maximum number of orders

Question 2: Create a new column DaysTakenForDelivery that contains the date difference between Order_Date and Ship_Date.

Question 3: Find the customer whose order took the maximum time to get delivered.

Question 4: Retrieve total sales made by each product from the data (use Windows function)

Question 5: Retrieve the total profit made from each product from the data (use windows function)

Question 6: Count the total number of unique customers in January and how many of them came back every month over the entire year in 2011