**LAB CYCLE 12**

**16 - 10 - 2019 , 23 - 10 - 2019**

**C R E A T E T H E C L I E N T \_ M A S T E R T A B L E D E S C R I B E D**

**B E L O W :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Datatype** | **Size** | **Constraints** |
| **Client\_No** | Char | 6 | Primary Key and first letter must start with ‘c’ |
| **Name** | Varchar | 20 | Not Null |
| **Address1** | Varchar | 30 |  |
| **Address2** | Varchar | 30 |  |
| **City** | Varchar | 15 |  |
| **Pincode** | Number | 8 |  |
| **State** | Varchar | 15 |  |
| **Bal\_Due** | Number | 10,2 |  |

**I N S E R T T H E F O L L O W I N G D A T A I N T O T H E T A B L E :**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **CLIENT\_NO** | **NAME** | **ADDRESS1** | **ADDRESS2** | **CITY** | **PINCODE** | **STATE** | **BAL\_DUE** |
| C00001 | Ivan Bayross | F-111 | p-111 | Mumbai | 400054 | Maharashtra | 15000 |
| C00002 | Mamta Muzandar | F-112 | p-112 | Madras | 780001 | Tamil Nadu | 0 |
| C00003 | Chaya Bankar | F-113 | p-113 | Mumbai | 400057 | Maharashtra | 5000 |
| C00004 | Aswani Joshi | F-114 | p-114 | Bangalore | 560001 | Karnataka | 0 |
| C00005 | Hasel colaco | F-115 | p-115 | Mumbai | 400060 | Maharashtra | 2000 |
| C00006 | Deepak Sharma | F-116 | p-116 | Manglore | 560050 | Karnataka | 0 |

**C R E A T E T H E P R O D U C T \_ M A S T E R T A B L E D E S C R I B E D B E L O W :**

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Datatype | Size | Constraints |
| Product\_No | varchar | 6 | Primary Key and first  letter must start with ‘p’ |
| Description | Varchar | 15 | Not Null |
| ProfitPercent | Number | 4,2 | Not Null |
| UnitMeasure | Varchar | 10 | Not Null |
| QtyOnHand | Number | 8 | Not Null |
| ReOrderLvl | Number | 8 | Not Null |
| SellPrice | Number | 8,2 | Not Null , cannot be zero |
| CostPrice | Number | 8,2 | Not Null , cannot be  zero |

**I N S E R T T H E F O L L O W I N G D A T A I N T O T H E T A B L E :**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PRODUCT\_ NO** | **DESCRIPTI ON** | **PROFIT PERCE NT** | **UNITMEAS URE** | **QTYONHA ND** | **REORDER LVL** | **SELLPRI CE** | **COSTPRI CE** |
| **P00001** | T-shirts | 5 | Piece | 200 | 50 | 350 | 250 |
| **P0345** | Shirts | 6 | Piece | 150 | 50 | 500 | 350 |
| **P06734** | Cotton Jeans | 5 | Piece | 100 | 20 | 600 | 450 |
| **P07865** | Jeans | 5 | Piece | 100 | 20 | 750 | 500 |
| **P07868** | Trousers | 2 | Piece | 150 | 50 | 850 | 650 |
| **P07885** | Pullovers | 2.5 | Piece | 80 | 30 | 700 | 450 |
| **P07965** | Denin Shirts | 4 | Piece | 100 | 40 | 350 | 250 |
| **P07975** | Tops | 5 | Piece | 70 | 30 | 300 | 175 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **P08865** | Skirts | 5 | Piece | 75 | 30 | 450 | 300 |

**C R E A T E T H E S A L E S M A N \_ M A S T E R T A B L E D E S C R I B E D B E L O W :**

|  |  |  |
| --- | --- | --- |
| **Column Name Datatype** | **Size** | **Constraints** |
| **Salesman\_No** varchar | 6 | Primary Key and first  letter must start with ‘s’ |
| **SalesmanName** Varchar | 20 | Not Null |
| **Address1** Varchar | 30 | Not Null |
| **Address2** Varchar | 30 |  |
| **City** Varchar | 20 |  |
| **PinCode** Number | 8 |  |
| **State** Varchar | 20 |  |
| **SalAmt** Number | 8,2 | Not Null , cannot be zero |
| **TgtToGet** Number | 6,2 | Not Null , cannot be zero |
| **YtdSales** Number | 6,2 | Not Null |
| **Remarks** Varchar | 60 |  |
| **I N S E R T T H E F O L L O W I N G D A T A** | **I N T O T H E** | **T A B L E :** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SALESM AN\_NO** | **SALESMA NNAME** | **ADDR ESS1** | **ADDR ESS2** | **CITY** | **PINC ODE** | **STATE** | **SAL AMT** | **TGTT OGET** | **YTDS ALES** | **REM ARKS** |
| **S00001** | Aman | A/14 | Worli | Mu mba i | 4000  02 | Mahar ashtra | 3000 | 100 | 50 | Good |
| **S00002** | Omkar | 65 | Narim an | Mu mba i | 4000  01 | Mahar ashtra | 3000 | 200 | 100 | Good |
| **S00003** | Raj | P-7 | Bandr a | Mu mba i | 4000  32 | Mahar ashtra | 3000 | 200 | 100 | Good |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S00004** | Ashish | A/5 | Juhu | Mu mba i | 4000  44 | Mahar ashtra | 3500 | 200 | 150 | Good |

**C R E A T E T H E S A L E S \_ O R D E R T A B L E D E S C R I B E D B E L O W :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Datatype** | **Size** | **Constraints** |
| **order\_No** | varchar | 6 | Primary Key and first letter must start with ‘O’ |
| **Client\_No** | char | 6 | Foreign Key References client\_No of client\_master table |
| **Orderdate** | Varchar | 10 | Not Null |
| **Delivery\_address** | Varchar | 25 |  |
| **Salesman\_No** | Varchar | 6 | Foreign Key references salesman\_No of salesman\_Master table |
| **Delivery\_type** | Char | 1 Delivery:Part(p)/full(f), default f | |
| **bill** | Char | 1 | |
| **Deliverydate** | Varchar | 10 Cannot be less than order date | |
| **Order\_status** | Varchar | 10 Values (‘inprogress’ , | |
| ‘fullfilled’, ‘backorder’,  ‘cancelled’) | | | |

**I N S E R T T H E F O L L O W I N G D A T A I N T O T H E T A B L E :**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **order\_**  **No** | **Client\_**  **No** | **Orderd**  **ate** | **Delivery\_ad**  **dress** | **Salesman**  **\_No** | **Delivery\_t**  **ype** | **bi**  **ll** | **Deliveryd**  **ate** | **Order\_st**  **atus** |
| O1900  1 | C0000  1 | 12-jun-  14 | F111 | S00001 | F | N | 20-jul-14 | In  process |
| O1900  2 | C0000  2 | 25-jun-  14 | F112 | S00002 | p | N | 27-jun-14 | cancelled |
| O4686  5 | C0000  3 | 18-feb-  14 | F113 | S00003 | F | Y | 20-feb-14 | Fulfilled |
| O1900  3 | C0000  1 | 03-apr-  14 | F111 | S00001 | F | Y | 7-apr-14 | Fulfilled |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| O4686  6 | C0000  4 | 20-  may-14 | F114 | S00002 | P | N | 22-may-  14 | Cancelled |
| O1900  8 | C0000  5 | 24-  may-14 | F115 | S00004 | f | N | 26-may-  14 | in  process |

**C R E A T E T H E S A L E S \_ O R D E R \_ D E T A I L S T A B L E D E S C R I B E D B E L O W :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Datatype** | **Size** | **Constraints** |
| **order\_No** | varchar | 6 | Foreign Key References order\_No of sales\_order table |
| **product\_No** | Varchar | 6 | Foreign Key References Product\_No of product\_master table |
| **Qtyordered** | Number | 8 |  |
| **Qtydisp** | Number | 8 |  |
| **Productrate** | Number | 10,2 |  |

**I N S E R T T H E F O L L O W I N G D A T A I N T O T H E T A B L E :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **order\_No** | **product\_No** | **Qtyordered** | **Qtydisp** | **Productrate** |
| O19001 | P00001 | 4 | 4 | 525 |
| O19001 | P07965 | 2 | 1 | 8400 |
| O19001 | P07885 | 2 | 1 | 5250 |
| O19002 | P00001 | 10 | 0 | 525 |
| O46865 | P07868 | 3 | 3 | 3150 |
| O46865 | P07885 | 3 | 1 | 5250 |
| O46865 | P00001 | 10 | 10 | 525 |
| O46865 | P0345 | 4 | 4 | 1050 |
| O19003 | P03453 | 2 | 2 | 1050 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| O19003 | P06734 | 1 | 1 | 12000 |
| O46866 | P07965 | 1 | 0 | 8400 |
| O46866 | P07975 | 1 | 0 | 1050 |
| O19008 | P00001 | 10 | 5 | 525 |
| O19008 | P07975 | 5 | 3 | 1050 |

# Updation

1. Change the city of client\_no c00005 to ‘Banglore’.
2. Change the Baldue of client\_no c00001 to Rs.1000.
3. Change the cost price of trousers to rs. 950.
4. Change the city of salesman to pune.

# Deletion

1. Delete all salesman from the salesman\_master whose salaries are equal to rs. 3500.
2. Delete all product from product\_master table where quantity\_on\_hand is equal to 100.
3. Delete from client\_master where column state holds the value Tamil nadu.

# Renaming

1. Change the name of salesman\_master table to sman-master.

# Retrieval

1. Find out the names of all clients.
2. Retrieve the entire contents of client\_master table.
3. Retrieve the list of names,city and state of all clients.
4. List the various products available from the product\_master table.

# Select with where

1. List all the clients who are located in Mumbai.
2. Find the names of salesman who have salary equal to 3000.
3. List the name of all clients having ‘a’ as the second letter in their names.
4. List the clients who stay in a city whose first letter is ‘M’
5. List all the clients who stay in banglore or manglore.
6. List all clients whose baldue is greater than value 10000.
7. List the products whose selling price is greater than 500 and and less than or equal to 750.
8. List the products whose selling price is more than 500.calculate a new selling price as original selling price\*2. Rename the new column in the output of the above query as new\_price.
9. List all the products whose qtyonhand is less than the reorderlevel.
10. List the order information for clientno. C00001 and c00002.
11. List the names, city and state of clients who are not in the state of Maharastra.

# Aggregate

1. Determine the maximum and minimum product prices, rename the output as max-price and min-price respectively.
2. Count the no. of products having price less than or equal to 500.

# Set operations.

1. Retrieve the names of all clients and salespersons residing in the city of Mumbai.
2. Retrieve the names of salespersons who are also clients.
3. Retrieve the names of all clients who are not salespersons.

# Sorting.

1. Retrieve all the clients in the descending order.

# Group by.

1.Print the description and total quantity sold for each product. 2.Find the value of each product sold.

1. Calculate the average quantity sold for each client that has a maximum order value of rs. 15000.
2. Find out the total of all the billed orders for the month of june.

# Sub Query

1. Find the productno and description of non-moving products ie, product not being sold.
2. List the customer name, address1, address2, city and pin code for the client who has placed orderno. ‘019001’
3. List the client names that have placed orders before the month of may 02
4. List if the product ‘Tops’ has been ordered by any client and print the clientno., name to whom it was sold.
5. List the names of clients who have placed orders worth rs.10000 or more.
6. List the names of clients whose total sales value is greater than rs. 10000.

# Joining tables.

1. Find out the product which have been sold to ‘Ivan bayross’
2. Find the products and their quantities that will have to be delivered in the current month.
3. List the product no. and description of constantly sold(rapidly moving) products
4. Find the names of clients who have purchased trousers.
5. List the products and orders from customers who have ordered less than 5 units of ‘pullovers’.
6. Find the products and their quantities for the orders placed by ‘Ivan bayross’ and ‘mamta muzumdar’.
7. Find the products and their quantities for the orders placed by clientno. C00001. And c00002
8. Illustrate the variations of join on salesman\_master and sales\_order tables(inner join, natural join, left outer join, right

outer join, full outer join)