

ASSIGNMENT-2

Perform the tables created previously generate the SQL statements for the operations mentioned below:

CREATE FOLLOWING TABLES:

1. CLIENT MASTER

COLUMN NAME	DATA TYPE	SIZE	DEFAULT	ATTRIBUTES
CLIENTNO.	VARCHAR2	6		Primary Key/first letter must start with 'C'
NAME	VARCHAR2	20		Not Null
ADDRESS1	VARCHAR2	30		
ADDRESS2	VARCHAR2	30		
CITY	VARCHAR2	15		
PINCODE	NUMBER	8		
STATE	VARCHAR2	15		
BALDUE	NUMBER	10,2		

2. PRODUCT MASTER

COLUMN NAME	DATA TYPE	SIZE	DEFAULT	ATTRIBUTES
PRODUCTNO	VARCHAR2	6		Primary Key/first letter must start with 'P'
DESCRIPTION	VARCHAR2	15		Not Null
PROFITPERCENT	NUMBER	4,2		Not Null
UNITMASTER	VARCHAR2	10		Not Null
QTYONHAND	NUMBER	8		Not Null
REORDERLVL	NUMBER	8		Not Null
SELLPRICE	NUMBER	8,2		Not Null, Cannot be 0
COSTPRICE	NUMBER	8,2		Not Null, Cannot be 0

3. SALESMANMASTER

COLUMN NAME	DATA TYPE	SIZE	DEFAULT	ATTRIBUTES
SALESMANNO	VARCHAR2	6		Primary Key/first letter must start with 'S'
SALESMANNAME	VARCHAR2	20		Not Null
ADDRESS1	VARCHAR2	30		Not Null
ADDRESS2	VARCHAR2	30		
CITY	VARCHAR2	20		
PINCODE	NUMBER	8		
STATE	VARCHAR2	20		
SALAMT	NUMBER	8,2		Not Null, Cannot be 0
TGTTGET	NUMBER	6,2		Not Null, Cannot be 0
YTDsales	NUMBER	6,2		Not Null, Cannot be 0
REMARKS	VARCHAR2	60		

4. Sales_Order

COLUMN NAME	DATA TYPE	SIZE	DEFAULT	ATTRIBUTES
ORDERNO	VARCHAR2	6		Primary key/ first letter must start with 'O'
CLIENTNO	VARCHAR2	6		Foreign key references ClientNo of ClientMaster table
ORDERDATE	DATE			Not null
DELYADDR	VARCHAR2	25		
SALESMANNO	VARCHAR2	6		Foreign key references SalesmanNo of SalesmanMaster
DELYTYPE	CHAR	1	F	Delivery: part(P)/ full(F)
BIILYN	CHAR	1		
DELYDATE	DATE			Cannot be less than Order_date
ORDERSTATUS	VARCHAR2	10		Values('In Process','Fullfilled','BackOrder','Cancelled')

5. Sales_Order_Details

COLUMN NAME	DATA TYPE	SIZE	DEFAULT	ATTRIBUTES
ORDERNO	VARCHAR2	6		Foreign key references OrderNo of sales_order table
PRODUCTNO	VARCHAR2	6		Foreign key references ProductNo of Productmaster tab
QTYORDERED	NUMBER	8		
QTYDISP	NUMBER	8		
PRODUCTRATE	NUMBER	10,2		

INSERTING THE FOLLOWING DATA INTO THEIR RESPECTIVE TABLES:

1. Data for client master table:

ClentnNo	Name	City	Pincode	State	BalDue
C00001	Rakesh Joshi	Mumbai	400054	Maharashtra	15000
C00002	Mayur Patel	Madras	780001	Tamilnadu	0
C00003	Ishita Mehta	Mumbai	400057	Maharashtra	5000
C00004	Amit Solanki	Bangalore	560001	Karnataka	0
C00005	Hiren Pandya	Mumbai	400060	Maharashtra	2000
C00006	Dipak Sharma	Mangalore	560050	Karnataka	0

2. Data for product master table

ProductNo	Description	Profit Percent	Unit Master	QtyOn Hand	RecordLvl	SellPrice	CostPrice
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	550
P07885	Pull Overs	2.5	Piece	80	30	700	450
P07965	Denim Shirts	4	Piece	100	40	350	250
P07975	Lycra Tops	5	Piece	70	30	300	175
P08865	Skirts	5	Piece	75	30	450	300

3. Data for SALESMAN MASTER table:

SalesmanNo	Name	Address1	Address2	City	Pincode	State	SalAmt	TgtToGet	YtdSales	Remarks
S00001	Aman	A/14	Worli	Mumbai	400002	Maharashtra	3000	100	50	Good
S00002	Omkar	65	Nariman	Mumbai	400001	Maharashtra	3000	200	100	Good
S00003	Raj	P-7	Bandra	Mumbai	400032	Maharashtra	3000	200	100	Good
S00004	Ashish	A/5	Juhu	Mumbai	400044	Maharashtra	3000	200	100	Good

4. Data for Sales_Order table:

OrderNo	ClientNo	OrderDate	SalesmanNo	DelyType	BillYN	DelyDate	OrderStatus
O19001	C00001	12-June-04	S00001	F	N	20-July-04	In Process
O19002	C00002	25-June-04	S00002	P	N	27-June-04	Cancelled
O46865	C00003	18-Feb-04	S00003	F	Y	20-Feb-04	Fulfilled
O19003	C00004	03-Apr-04	S00001	F	Y	07-Apr-02	Fulfilled
O46866	C00005	20-May-04	S00002	P	N	22-May-04	Cancelled
O19008	C00006	24-May-04	S00004	F	N	26-July-04	Fulfilled

5. Data for Sales_order_details.

OrderNo	ProductNo	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

[A] Perform the following computations on table data:

1. List the names of all clients having 'a' as the second letter in their names.
2. List the clients who stay in a city whose First letter is 'M'.
3. List all the clients who stay in 'Bangalore' or 'Mangalore'.
4. List all clients whose BalDue is greater than value 10000.
5. List all information from the Sales_Order table for orders placed in the month of June.
6. List the order information for ClientNo. 'C00001' and 'C00002'.
7. List products whose selling price is greater than 500 and less than or equal to 750.
8. List product whose selling price is more than 500.
9. Calculate a new selling price as, original selling price *0.15.
10. Rename the new column in the output of the above query as new_price.
11. List the names, city and state of clients who are not in the state of 'Maharashtra'.
12. Calculate the average price of all the products.
13. Determine the maximum and minimum product prices. Rename the output as max_price and min_price respectively.
14. Count the number of products having price less than or equal to 500.
15. List all the products whose QtyOnHand is less than reorder level.

[B] Exercise on Date Manipulation:

1. List the order number and day on which clients placed their order.
2. List the month (in alphabets) and date when the orders must be delivered.
3. List the Order Date in the format 'DD-Month-YY'. E.g. 20-November-02.
4. List the date, 15 days after today's date.

[C] Exercise on using Having and Group By Clauses:

1. Print the description and total qty sold for each product.
2. Find the values of each product sold.
3. Calculate the average qty sold for each client that has maximum order value of 15000.00.
4. Find out the total of all the billed orders for the month of June.

[D] Exercise on Joins and Correlation:

1. Find out the products, which have been sold to 'Rakesh Joshi'.
2. Find out the products and their quantities that will have to be delivered in the current month.
3. List the ProductNo and description of constantly sold (i.e. 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 'Pull Overs'.
6. Find the products and their quantities for the orders placed by 'Rakesh Joshi' and 'Mayur Patel'.
7. Find the products and their quantities for the orders placed by ClientNo 'C00001' and 'C00002'.

[E] Exercise on Sub-queries:

1. Find the ProductNo and description of non-moving products i.e. products not being sold.
2. List the CustomerName, Address1, Address2, City and Pin Code for the client who has placed order no 'O19001'.
3. List the client names that have placed orders before the month of May-04
4. List if the product 'Lycra Top' has been ordered by any client and print the Client No., Name to whom it was sold.
5. List the names of clients who have placed orders worth Rs. 10000 or more.