

SELF REVIEW QUESTIONS

READ THE QUESTIONS AND WRITE DOWN APPROPRIATE SQL STATEMENTS, AS ANSWERS.

1) Create the tables described below:

- a) **Table Name:** Client\_master  
**Description:** Used to store client information.

Column Name	Date Type	Size	Attributes
Client_No	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	
Bal_due	Number	10,2	

- b) **Table Name:** product\_master  
**Description:** Used to store product information.

Column Name	Date Type	Size	Attributes
Product_no	Varchar2	6	Primary Key / first letter must start with ‘P’
Description	Varchar2	15	Not Null
Profit_percent	Number	4,2	Not Null
Unit_measure	Varchar2	10	Not Null
Qty_no_hand	Number	8	Not Null
Reorder_lvl	Number	8	Not Null
Sell_price	Number	8,2	Not Null, cannot be 0.
Cost_price	Number	8,2	Not Null, cannot be 0.

- c) **Table Name:** salesman\_master  
**Description:** Used to store salesman working for the company.

Column Name	Date Type	Size	Attributes
salesman_no	Varchar2	6	Primary Key / first letter must start with ‘S’
Salesman_name	Varchar2	20	Not Null
Address1	Varchar2	30	Not Null
Address2	Varchar2	30	
City	Varchar2	20	
Pincode	Varchar2	8	
State	Varchar2	20	
Sal_amt	Number	8,2	Not Null, cannot be 0.
Tgt_to_get	Number	6,2	Not Null, cannot be 0.
Ytd_sales	Number	6,2	Not Null
Remarks	Varchar2	60	

d) **Table Name:** sale\_order

**Description:** Used to store client's orders

Column Name	Date Type	Size	Attributes
order_no	Varchar2	6	Primary Key / first letter must start with 'O'
order_date	Date		
Client_no	Varchar2	6	Foreign Key references client_no of client_master table
Dely_Addr	Varchar2	25	
Salesman_no	Varchar2	6	Foreign Key reference salesman_no of salesman_master table
Dely_type	Chart	1	Delivery : part(P) / full (F) Default 'F'
Billed_yn	Chart	1	
Dely_date	Date		Cannot be less then order_date
Order_status	Varchar2	10	Values ('In Process', 'Fulfilled', 'Back Order', 'Cancelled')

e) **Table Name:** sale\_order\_details

**Description:** Used to store client's orders with details of each product ordered.

Column Name	Date Type	Size	Attributes
order_no	Varchar2	6	Primary Key / Foreign Key references order_no of the sales_order table
Producr_no	Varchar2	6	Primary Key / Foreign Key references order_no of the sales_order table
Qty_ordered	Number	8	
Qty_disp	Number	8	
Product_rate	Number	10,2	

2) **Insert the following data into their respective tables:**

a) Date for **client\_master** table:

Client No.	Name	City	Pincode	State	Bal. Due
C00001	Ivan Bayross	Bombay	400054	Maharastra	15000
C00002	Vandana Saitwal	Madras	780001	Tamil Nadu	0
C00003	Pramada Jaguste	Bombay	400057	Maharastra	5000
C00004	Basu Navindgi	Bombay	400056	Maharastra	0
C00005	Ravi Sreedharan	Delhi	100001	Delhi	2000
C00006	Rukmini	Bombay	400050	Maharastra	0

b) Data for **product\_master** table:

Product no	Description	Profit percent	Uom	Qty on hand	Reorder level	Sell piece	Cost prose
P00001	1.44 Floppies	5	Piece	100	20	525	500
P03453	monitors	6	Piece	10	3	12000	11280
P06734	mouse	5	Piece	20	5	1050	1000
P07865	1.22 Floppies	5	Piece	100	20	525	500
P07868	keyboards	2	Piece	10	3	3150	3050
P07885	CD Drive	2.5	Piece	10	3	5250	5100
P07965	540 HHD	4	Piece	10	3	8400	8000
P07975	1.44 Drive	5	Piece	10	3	1050	1000
P08865	1.22 Drive	5	Piece	2	3	1050	1000

c) Data for **salesman\_master** table:

Salesman no	Salesman name	Address 1	Address 2	City	Pincode	State	Salamt	Tet_t o get	Ytd sales	Remarks
S00001	Kiran	A/14	Worli	Bombay	400002	Maharastra	3000	100	50	Good
S00002	Manish	65	Nariman	Bombay	400001	Maharastra	3000	200	100	Good
S00003	Ravi	P-7	Bandra	Bombay	400032	Maharastra	3000	200	100	Good
S00004	Aashish	A/5	Juhu	Bombay	400044	Maharastra	3500	200	150	Good

d) Data for **sales\_order** table:

Order no	Order date	Client no	Dely type	Bill yn	Salesman no	Dely date	Order status
O19001	12-Jan-96	C00001	F	N	S00001	20-Jan-96	In Process
O19002	25-Jan-96	C00002	P	N	S00002	27-Jan-96	Cancelled
O46865	18-Feb-96	C00003	F	Y	S00003	20-Feb-96	Fulfilled
O19003	03-Apr-96	C00001	F	Y	S00001	07-Apr-96	Fulfilled
O46866	20-May-96	C00004	P	N	S00002	22-May-96	Cancelled
O19008	24-May-96	C00005	F	N	S00004	26-May-96	In process

e) Data for the **sales\_order\_details** table:

Order no.	Product no.	Qty ordered	Qty disp	Product rate
019001	P00001	4	4	525
019001	P07965	2	1	8400
019001	P07885	2	1	5250
019002	P00001	10	0	525
046865	P07868	3	3	3150
046865	P07885	3	1	5250
046865	P00001	10	10	525
046865	P03453	4	4	1050
019003	P03453	2	2	1050
019003	P06734	1	1	12000
046866	P07965	1	0	8400
046866	P07975	1	0	1050
019008	P00001	10	5	525
019008	P07975	5	3	1050

**3) Exercises computation on table data:**

- a) Find the name of all clients having 'a' as the second letter in their names
- b) Find out the clients who stay in a city whose second letter is 'a'.
- c) Find the list of all client who stay in 'Bombay' or 'Delhi'.
- d) Print the list of client whose bal\_due is greater then value 10000.
- e) Print the information from sales\_oeder table for order placed in the month of January.
- f) Display the order information for client\_no 'C00001' and 'C00002'.
- g) Find products whose selling price is greater than 2000 and less than or equal to 5000.
- h) Find products whose selling price is more than 1500. Calculate a new selling price as, original selling price \* .15. Rename the new column in the above query as new\_price.
- i) List the names, city and state of clients who r not in the state of 'Maharastra'.
- j) Count the total number of orders.
- k) Calculate the average price of all the products.
- l) Determine the maximum and minimum product prices. Rename the output as max\_price and min\_price respectively.
- m) Count the number of products having price greater than or equal to 1500.
- n) Find all the products whose qty\_no\_nahd is less than recorder level.

**4) Exercise on Date Manipulation:**

- a) Display the order number and day on which clients placed their order.
- b) Display the month (in alphabets) and date when the order must be delivered.
- c) Display the order\_date in the format 'DD-Month-yy'. e.g. 12-February-96.
- d) Find the date, 15 days after today's date.
- e) Find the number of days elapsed between today's date and the delivery date of the orders placed by the clients.

**5) Exercise on using Having and Group By Clauses:**

- a) Print the description and total qty sold for each product.
- b) Find the value of each product sold.
- c) Calculate the average qty sold for each client that has a maximum order value of 15000.00.
- d) Find out the sum total of all the billed orders for the month of January.

**6) Exercise on Joins and Correlation:**

- a) Find out the products, which have been sold to 'Ivan Bayross'.
- b) Find out the products and their quantities that will have to be delivered in the current month.
- c) Find the product\_no and description of constantly sold i.e. rapidly moving products.
- d) Find the name of clients who have purchase 'CD Drive'.
- e) List the product\_no and order\_no of customers having qty\_ordered less than 5 from the sales\_order\_details table for the product '1.44 Floppies'.
- f) Find the products and their quantities for the orders placed by 'Ivan Bayross' and 'Vandana Saitwal'.
- g) Find the products and their quantities for the orders placed by client\_no 'C00001' and 'C00002'.

**7) Exercise on Sub-queries:**

- a) Find the product\_no and description of non-moving products i.e. products not being sold.
- b) Find the customer name, address1, address2, city and pin code for the client who has placed order no 'O19001'.
- c) Find the client names who have placed orders before the month of May'96.
- d) Find out if the product '1.44 Drive' has been ordered by any client and print the clint\_no, name to whom it was sold.
- e) Find the names of clients who have placed orders worth Rs.10000 or more.

**8) Exercise on Constructing Sentences with data:**

- a) Print information from product\_master, sales\_order\_detail tables in the following format for all the records:  
{Description} worth Rs. {total sales for the product} was sold.
- b) Print information from product\_master, sales\_order\_detail tables in the following format for all the records:  
{Description} worth Rs. {total sales for the product} was ordered in the month of {order\_date in month format}.
- c) Print information from client\_master, product\_master, sales\_order tables in the following format for all the records:  
{cust\_name} has placed order {order\_no} on {order\_date}.