**Assignment 2:**

Create the following tables:

Table Name: **Client\_master**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Size** | **Attributes** |
| Client\_no | Varchar2 | 6 | Primary key / 1st letter must start with ‘c’ |
| Name | Varchar2 | 20 | Not null |
| City | Varchar2 | 15 |  |
| Pincode | Number | 8 |  |
| State | Varchar2 | 15 |  |
| Bal\_due | Number | 10,2 |  |

Table Name: **product\_master**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Size** | **Attributes** |
| Product\_no | Varchar2 | 6 | Primary key / 1st letter must start with ‘p’ |
| Description | Varchar2 | 15 | Not null |
| Profit\_percent | Varchar2 | 4,2 | Not null |
| Unit\_measure | Varchar2 | 10 | Not null |
| Qty\_on\_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 |

Table Name: **salesman\_master**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Size** | **Attributes** |
| Salesman\_no | Varchar2 | 6 | Primary key / 1st letter must start with ‘s’ |
| Salesman\_name | Varchar2 | 20 | Not null |
| Address1 | Varchar2 | 10 | Not null |
| Address1 | Varchar2 | 10 |  |
| City | Varchar2 | 20 |  |
| Pincode | Number | 7 |  |
| 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 | 20 |  |

Table name: **sales\_order**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Size** | **Attributes** |
| Order\_no | Varchar2 | 6 | Primary key / 1st letter must start with ‘0’ |
| Order\_date | date |  |  |
| Client\_no | Varchar2 | 6 | Foreign key references client\_no. of client\_master |
| Dely\_address | Varchar2 | 25 |  |
| Salesman\_no | Varchar2 | 6 | Foreign key references salesman\_no of salesman\_master |
| Dely\_type | Char | 1 | Delivary: part(P) / full (F) default ‘F’ |
| Billed\_yn | Char | 1 |  |
| Dely\_date | Date |  | Cannot be less than order\_date |
| Order\_status | Varchar2 | 10 | Values (‘in process’, ‘fulfilled’,’backorder’,’cancelled’ |

Table Name: **sales\_order\_details**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Size** | **Attributes** |
| Order\_no | Varchar2 | 6 | Primary\_key / foreign key ref. Order\_no of the sales\_order table. |
| Product\_no | Varchar2 | 6 | Primary\_key / foreign key ref. Product\_no of the product\_master table |
| Qty\_ordered | Number | 8 |  |
| Qty\_Disp | Number | 8 |  |
| Product\_rate | Number | 10,2 |  |

Insert the following data into their respective tables:

Data for CLIENT MASTER table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ClientNo | Name | City | Pincode | State | BalDue |
| C00001 | Ivan Bayross | Mumbai | 400054 | Maharashtra | 15000 |
| C00002 | Mamta Mazumdar | Madras | 780001 | Tamil Nadu | 0 |
| C00003 | ChhayaBankar | Mumbai | 400057 | Maharashtra | 5000 |
| C00004 | Ashwini Joshi | Bangalore | 560001 | Karnataka | 0 |
| C00005 | Hansel Colaco | Mumbai | 400060 | Maharashtra | 2000 |
| C00006 | Deepak Sharma | Mangalore | 560050 | Karanataka | 0 |

Data for PRODUCT MASTER table:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ProductNo | Description | Profit Percent | Unit Measure | QtyOrr  Hand | ReorderLvl | 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 | PuM-Overs | 2.5 | Piece | 80 | 30 | 700 | 450 |
| P07965 | Denim Shirts | 4 | Piece | 100 | 40 | 350 | 250 |
| P07975 | Lyers Tops | 5 | Piece | 70 | 30 | 300 | 175 |
| P08865 | Skirts | 5 | Piece | 75 | 30 | 450 | 300 |

Data for SALESMAN MASTER table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SalesmanNo | Name | Address1 | Address2 | City | PinCode | State |
| S00001 | Aman | A/14 | Worli | Mumbai | 400002 | Maharashtra |
| S00002 | Omkar | 65 | Nariman | Mumbai | 400001 | Maharashtra |
| S00003 | Raj | P-7 | Bandra | Mumbai | 400032 | Maharashtra |
| S00004 | Ashish | A/5 | Juhu | Mumbai | 400044 | Maharashtra |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SalesmanNo | SalAmt | TgtToGet | YtdSales | Remarks |
| S00001 | 3000 | 100 | 50 | Good |
| S00002 | 3000 | 200 | 100 | Good |
| S00003 | 3000 | 200 | 100 | Good |
| S00004 | 3500 | 200 | 150 | Good |

Data for SALES ORDER table:

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

Data for SALES ORDER DETAILS table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |

**Write necessary SQL queries with corresponding Outputs for the following:**

1. Find the names of all clients having ‘a’ as the second letter in their names.
2. Find out the clients who stay in a city whose second letter is 'a'.
3. Find the list of all clients who stay in 'Bombay' or 'Delhi'
4. Print the list of clients whose bal\_due is greater than value 10000.
5. Print the information from sales\_order table for orders placed in the month of January.
6. Display the order information for client\_no 'C00001' and 'C00002'.
7. Find products whose selling price is greater than 2000 and less than or equal to 5000.
8. 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.
9. List the names, city and state of clients who are not in the state of 'Maharashtra'.
10. Count the total number of orders.
11. Calculate the average price of all the products.
12. Determine the maximum and minimum product prices. Rename the output as max\_price and min\_price respectively.
13. Count the number of products having price greater than or equal to 1500.
14. Find all the products whose qty\_on\_hand is less than reorder level.
15. Display the order number and day on which clients placed their order.