AMAL JYOTHI OF ENGINEERING, KANJIRAPALLY DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING S5 CSE DBMS Lab Cycle1

1. Create the following tables

CLIENT_MASTER

| Column name | Datatype | Size | Default | Attributes |
|-------------|----------|------|---------|------------|
| Client No | Varchar2 | 6 | | |
| Name | Varchar2 | 20 | | |
| Address1 | Varchar2 | 50 | | |
| Address2 | Varchar2 | 50 | | |
| City | Varchar2 | 15 | | |
| Pincode | Number | 8 | | |
| State | Varchar2 | 15 | | |
| BalDue | Number | 10,2 | | |

PRODUCT_MASTER

| Column name | Datatype | Size | Default | 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 on hand | Number | 8 | | Not Null |
| Reorderlyl | Number | 8 | | Not Null |
| Sell price | Number | 8,2 | | Not Null, cannot be 0 |
| Cost price | Number | 8,2 | | Not Null, cannot be 0 |

SALESMAN MASTER

| Column name | Datatype | Size | Default | Attributes |
|--------------|----------|------|---------|--|
| Salesman No | 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 |
| Tgttoget | Number | 6,2 | | Not Null, cannot be 0 |
| Ytdsales | Number | 6,2 | | Not Null |
| Remarks | Varchar2 | 60 | | |
| SALES_ORDER | R | T | | |
| Column name | Datatype | Size | Default | Attributes |
| Order No | Varchar2 | 6 | | Primary Key/first letter must start with 'O' |
| Client No | Varchar2 | 6 | | Foreign key references client no of client_master table |
| Orderdate | Date | | | Not Null |
| Delyaddr | Varchar2 | 25 | | |
| Salesmanno | Varchar2 | 6 | | Foreign Key references Salesman No of Salesman_master table |
| Delytype | Char | 1 | | part(P)/full(F) |
| Billyn | Char | 1 | | - |
| Delydate | Date | | | Cannot be less than order_date |
| Orderstatus | varchar2 | 10 | | Value in ('Process','Fulfilled' ,'Backorder','Cance lled') |
| SALES_ORDER | R_DETAILS | | | |
| Column name | Datatype | Size | Default | Attributes |
| Order No | Varchar2 | 6 | | Foreign key references Order no of sales_order table |
| Product No | Varchar2 | 6 | | Foreign key references productno of product_master |

| | | | table |
|--------------|--------|------|-------|
| Qtyordered | Number | 8 | |
| Qtydisp | Number | 8 | |
| Product rate | Number | 10,2 | |

- i. Alter the table "CLIENT_MASTER" to add a column called "Age" with data type Date.
- **ii.** Modify the table of "**PRODUCT_MASTER**" to add a column "Product Code" with data type LONG.
- iii. Alter the table "CLIENT_MASTER" to add a check constraint on column "Pincode" to accept number from 10000 to 1000000 only.
- iv. Drop the field "Age" of "CLIENT_MASTER" table
- v. Reduce the size of column "Address1" and "Address2" in "CLIENT MASTER" table from 50 to 30
- 2. Insert the following data into their respective tables

CLIENT_MASTER

| Client No | Name | Address1 | Address2 | City | Pincode | State | Baldue |
|-----------|--------------------|----------|-----------|-----------|---------|------------|--------|
| C00001 | Ivan Bayross | A/14 | Rose | Mumbai | 4000054 | Maharastra | 15000 |
| C00002 | Mamta muzumbdar | 65 | Lilli | Madras | 780001 | Tamilnadu | 0 |
| C00003 | Chaya Banker | P-7 | Sunflower | Mumbai | 400057 | Maharastra | 5000 |
| C00004 | Ashwini John | A/5 | Jasmine | Bangalore | 560001 | Karnataka | 0 |
| C00005 | Hansel Colaco | A/6 | KK nagar | Mumbai | 400060 | Maharastra | 2000 |
| C00006 | Deepak Sharma | P-8 | Raj road | Mangalore | 560050 | Karnataka | 0 |

PRODUCT_MASTER

| Product No | Description | Profit percent | Unit measure | Qty on hand | Reorderlyl | Sell price | Cost price |
|------------|--------------|----------------|-----------------|-------------|------------|------------|---------------|
| P00001 | T-shirt | 5 | Piece | 200 | 50 | 350 | 250 |
| P0345 | Shirt | 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 |

SALESMAN_MASTER

| Salesm an No | Name | Addr ess1 | Address2 | City | Pincode | State | SalAmt | TgtTo Get | Ytd Sales | Rem arks |
|-----------------|-------|--------------|-----------|--------|---------|-------------|--------|--------------|--------------|-------------|
| S00001 | Aman | A/14 | Rose | Mumbai | 400002 | Maharashtra | 3000 | 100 | 50 | Good |
| S00002 | Omkar | 65 | Lilli | Mumbai | 400001 | Maharashtra | 3000 | 200 | 100 | Good |
| S00003 | Raj | P-7 | Sunflower | Mumbai | 400032 | Maharashtra | 3000 | 200 | 100 | Good |
| S00004 | Asish | A/5 | Jasmine | Mumbai | 400044 | Maharashtra | 3500 | 200 | 150 | Good |

SALES_ORDER

| Order No | Client No | Order Date | Salesman No | Dely type | BillYn | Dely Date | Order Status |
|----------|-----------|------------|-------------|-----------|--------|------------|-----------------|
| O19001 | C00001 | 12-June-04 | S00001 | F | N | 20-July-02 | InProcess |
| O19002 | C00002 | 25-June-04 | S00002 | P | N | 27-June-02 | Cancelled |
| O46865 | C00003 | 18-Feb-04 | S00003 | F | Y | 20-Feb-02 | Fulfilled |
| O19003 | C00004 | 03-Apr-04 | S00001 | F | Y | 07-Apr-02 | Fulfilled |
| O46866 | C00005 | 20-May-04 | S00002 | P | N | 22-May-02 | Cancelled |
| O19008 | C00006 | 24-May-04 | S00004 | F | N | 26-July-02 | InProcess |

SALES_ORDER_DETAILS

| Order No | Product No | Qty Ordered | Qty Disp | Product Rate |
|----------|---------------|-------------|----------|--------------|
| 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 | 84000 |
| O46866 | P07975 | 1 | 0 | 1050 |
| O19008 | P00001 | 10 | 5 | 525 |
| O19008 | P07975 | 5 | 3 | 1050 |

- 3. List the names 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 clients who stay in Bangalore or Mangalore
- 6. List all clients whose BalDue is greater than value 10000
- 7. List all information from the sales_order table for orders placed in the month of June
- 8. List the order information for clientNo 'C00001' and 'C00002'
- 9. List products whose selling price is greater than 500. Calculate a new selling price as original selling price * 0.15. Rename the new column in the output of the above query as new_price.
- 10. List the names, city and sales of clients who are not in the state of 'Maharashtra'
- 11. Count the total number of orders
- 12. Calculate the average price of all the products
- 13. Determine the maximum and minimum product prices. Rename the output as ma_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 lessthan reorder level
- 16. List the order number and day on which Clients placed their order
- 17. List the month (in alphabet) and date when the orders must be delivered.
- 18. List the orderdate in the format 'DD-MONTH-YY'.
- 19. List the date,15 days after today's date.
- 20. Print the description and total qty sold for each product
- 21. Find the value of each product sold
- 22. Calculate the average qty sold for each client that has a maximum order value of 15000.00
- 23. Find out the total of all the billed orders for the month of June.
- 24. Find out the products which have been sold to 'Ivan Bayross'
- 25. Find out the products and their quantities that will have to be delivered in the current month.
- 26. List the product no and description of constantly sold(ie rapidly moving) products
- 27. Find the names of clients who have purchased 'Trousers'.
- 28. List the products and orders from customers who have ordered less than 5 units of 'Pull Overs'
- 29. Find the products and their quantities for the order s placed by 'Ivan Bayross' and 'Mamta Muzumdar'
- 30. Find the products and their quantities for the order s placed by Cline No 'C00001' and 'C00002'.
- 31. Find the product no and description of non-moving products not being sold
- 32. List the customer name, Address 1, Address 2, City, Pincode for the client who has placed order no 'O19001'
- 33. List the client names that have placed orders before the month of May 02.
- 34. List if the product 'Lycra Top' has been ordered by any client and print the Client-no,name to whom it was sold.
- 35. List the names of clients who have placed orders worth Rs.10000 or more.