1. Create tables for Client, Product, and Salesman with the attributes given, implementing DDL commands for specifying prime attributes, non-prime attributes, foreign keys, cardinalities, null values, constraints etc. and the data types. Implement DDL commands for drop, alter on the tables created.

2. Implement DML commands like populating the tables with data using insert command and retrieving data using simple [queries](http://etcm.ticollege.org/cms/mod/assign/view.php?id=2027) in SQL. (Application of select, update, delete etc.)

i>                  Create the following tables:

CLIENT\_MASTER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Size | Default | Attributes |
| Client\_no | Varchar2 | 6 |  | Primary key / first letter must start with ‘C’ |
| Name | Varchar2 | 20 |  | Not Null |
| City | Varchar2 | 15 |  |  |
| Pincode | Number | 8 |  |  |
| State | Varchar2 | 15 |  |  |
| BalDue | Number | 10,2 |  |  |

**PRODUCT\_MASTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Size | Default | Attributes |
| Product\_no | Varchar2 | 6 |  | Primary key / first letter must start with ‘P’ |
| Description | Varchar2 | 15 |  | Not Null |
| QTY\_ON\_Hand | Number | 8 |  | Not Null |
| Sell\_Price | Number | 8,2 |  | Not Null, can not be 0 |
| Cost\_Price | Number | 8,2 |  | Not Null, can not be 0 |

SALESMAN\_MASTER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Size | Default | Attributes |
| Salesman\_no | Varchar2 | 6 |  | Primary key / first letter must start with ‘S’ |
| Salesman\_name | Varchar2 | 20 |  | Not Null |
| City | Varchar2 | 20 |  | Not Null |
| Pincode | Number | 8 |  | Not Null |
| State | Varchar2 | 20 |  | Not Null |
| Sal\_Amt | Number | 8,2 |  | Not Null, can not be 0 |

**SALES\_ORDER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | 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 |
| Order\_date | Date |  |  |  |
| Salesman\_no | Varchar2 | 6 |  | Foreign     key     references          Salesman\_no  of SALESMAN\_MASTER table |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dely\_type | Char | 1 | F | Delivery: Part(P)/Full(F) |
| Dely\_date | Date |  |  |  |

SALES\_ORDER\_DETAILS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Size | Default | Attributes |
| Order\_no | Varchar2 | 6 |  | Foreign      key      references            Order\_no  of SALES\_ORDER table |
| Product\_no | Varchar2 | 6 |  | Foreign   key   references       Product\_no of  PRODUCT\_MASTER table |
| Qty\_disp | Number | 8 |  |  |
| Product\_rate | Number | 10,2 |  |  |

1. Insert 5 records in each table.
2. Answer the following [queries](http://etcm.ticollege.org/cms/mod/assign/view.php?id=2027):
3. Exercise on retrieving records from a table:
   1. Find out the names of all clients.
   2. Retrieve the entire contents of the 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.
   5. List all clients who are located in Mumbai.
   6. Find the names of salesman who have a salary equal to 3000.
   7. Show the details of Product\_Master according to Cost\_Price in descending order.
   8. Show different types of salary amounts of the salesman.
   9. Show only unique product details.

ii>

* + 1. Exercise on updating records in a table:
       1. Change the city of client no ‘C001’ to ‘Bangalore’.
       2. Change the BalDue of client no ‘C006’ to Rs. 1000.
       3. Change the cost price of ‘Trousers’ to Rs. 950.00.
       4. Change the city of the salesman to ‘Pune’.
       5. Add a column called ‘Telephone’ of data type number and size = 10 to the Client\_Master table.
       6. Change the size of Sell\_Price column in Product\_Master to 10, 2.
       7. Drop the column Cost\_Price from Product\_Master.
       8. Delete all salesmen from the Salesman\_Master whose salaries are equal to Rs. 3500.
       9. Delete all products from Product\_Master where the quantity on hand is equal to 100.
       10. Delete from Client\_Master where the column state holds the value ‘Tamil Nadu’.
       11. Change the name of the Salesman\_Master table to Sman\_Mast.
       12. Destroy the table Client\_Master along with its data.