## **ADVANCED DBMS LAB**

(Semester & Batch: S2 MCA 2021 A Batch)

## CYCLE -1 - Part 2

**CO** 1

Design and build a simple relational database system and demonstrate competence with the fundamentals tasks involved with modelling, designing and implementing a database.

1.Create the tables described below

Table Name: PRODUCT\_MASTER

Description : used to store product information

Column name	Data type	size
PRODUCTNO	Varchar2	6
DESCRIPTION	Varchar2	15
PROFITPERCENT	Varchar2	4,2
UNITMEASURE	Varchar2	10
QTYONHAND	Number	8
REORDERLVL	Number	8
SELLPRICE	Number	8,2
COSTPRICE	Number	8,2

Table Name : CLIENT\_MASTER

Description : used to store client information

Column name	Data type	size	
CLIENTNO	Varchar2	6	
NAME	Varchar2	20	
ADDRESS1	Varchar2	30	
ADDRESS2	Varchar2	30	
CITY	Varchar2	15	
PINCODE	Number	8	
STATE	Varchar2	15	
BALDUE	Number	10,2	

Table Name: SALESMAN\_MASTER

Description : used to store salesman information working for the company

Column name	Data type	size
SALESMANNO	Varchar2	6
SALESMANNAME	Varchar2	20
ADDRESS1	Varchar2	30
ADDRESS2	Varchar2	30
CITY	Varchar2	15
PINCODE	Number	8
STATE	Varchar2	15

1.generate SQL statements to perform the following computations on table data

- a) list the names of all clients having 'a' as the second letter in their names.
- b) listing of clients who stay in a city whose first letter is 'M'
- c) list all clients who stay in 'Bangaluru' or 'Mangalore'
- d) list all clients whose BalDue is greater than 10000
- e) display the order information of clientno 'C00001' and 'C00002'
- f) list products whose selling price is greater than 500 and less than or equal to 750
- g) listing of names, city and state of clients who are not in the state of 'maharashtra'.
- h) count the total number of orders
- i) calculating the average price of all products.
- j) determining the maximum and minimum price for the product prices.
- k) count the number of products having the price greater than or equal to 500

(Exercise on order by and group by clauses)

- 2. Create Sales table with the following fields (Sales No, Salesname, Branch, Salesamount, DOB)
  - a) Insert five records
  - b) Calculate total salesamount in each branch
  - c) Calculate average salesamount in each branch .Display the name and DOB of salesman in alphabetical order of the month.
- **3** Create an Emp table with the following fields:

(EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay)

(Calculate DA as 30% of Basic and HRA as 40% of Basic)

- a) Insert Five Records and calculate GrossPay and NetPay.
- b) Display the employees whose Basic is lowest in each department.
- c) If NetPay is less than Rs.10,000 add Rs.1200 as a special allowances
- d) Display the employees whose GrossPay lies between 10,000 & 20,000
- 4. Create a table called EMP with the following structure.

Name	Type	
EMPNO	NUMBER (6)	
ENAME	VARCHAR2 (20)	
JOB	VARCHAR2 (10)	
DEPTNO	NUMBER (3)	
SAL	NUMBER (7,2)	

- a) Allow NULL for all columns except ename and job.
- b) Add constraints to check, while entering the empno value (i.e) empno > 100.
- c) Define the field DEPTNO as unique.
- d) Create a primary key constraint for the table (EMPNO).
- e) Write queries to implement and practice constraints