1. CUSTOMER-PRODUCT-PURCHASE RELATIONS

<u>Aim :</u> write queries to create and retrieve customer and product relationship, constraints, built in functions, Group by, Order by, View drop, DML command.

<u>Table design</u> :
PURCHASE (order_no notnull int,custno notnull int, prono varchar(15) notnull,quantity notnull int, orderdate date, primarykey order_no, foreignkey cust no, foreignkey prono)

PRODUCT (product_no notnull varchar(15),description notnul lvarchar(15), company notnull varchar(15),price notnull int, primarykey product_no)

CUSTOMER (cust_no notnull varchar(15), name notnullvarchar(15), age notnull int,city notnull varchar(15), pincode notnull int, state notnullvarchar(15), primarykey cust_no)

SUPPLIER (s_no notnull varchar(10), sname notnullvarchar(15), age notnull int,city notnull varchar(15), primarykey sno)

sample instances of these tables are given below
PURCHASE :

ORDER_NO	CUSTNO	PRODNO	QUANTITY	ORDERDATE
O00001	C00002	P00003	2	20-JAN-16
O00002	C00003	P00002	1	27-JAN-16
O00003	C00006	P00001	3	20-FEB-16
O00004	C00003	P00005	4	07-APR-16
O00005	C00004	P00002	2	22-MAY-16
O00006	C00005	P00004	1	26-MAY-16

PRODUCT

PRODUCT_NO	DESCRIPTION	COMPANY	PRICE
P00001	12 W Flood Light	Wipro	5000
P00002	Laptop Adapter	Dell	1560
P00003	Tablet	HCL	11000
P00004	Garnet 50W led	Wipro	999
P00005	Laptop Charger	HCL	1690

CUSTOMER

CUST_NO	NAME	AGE	CITY	PINCODE	STATE
C00001	Ivan Bayross	35	Bombay	400054	Maharashtra
C00002	Vandana Saitwal	35	Madras	780001	Tamilnadu
C00003	Pramada Jaguste	55	Bombay	400057	Maharashtra
C00004	Basu Navindgi	45	Bombay	400056	Maharashtra
C00005	Ravi Sreedharan	25	Delhi	100001	Delhi
C00006	Rukmini	25	Madras	780001	Tamilnadu

SUPPLIER

S_NO	SNAME	AGE	CITY
S001	Ivan Bayross	35	Bombay
S002	Nirmala Agarwal	35	Madras
C003	Susmitha	55	Bombay
C004	Basu Navindgi	45	Bombay
C005	Ravi Sreedharan	25	Delhi
C006	Nanda Gopal	25	Madras

Questions

1. List all customers in Madras
2. List all customer- numbers of all who purchase the product in the month of January
3. List all the name of company whose price is greater than 5000?
4. List all the customers whose name is not beginning with 'r'?
5. Add email field into the customer table?
6. List all the customers whose age is greater than 40 in Maharashtra?
7. Display the company's name in the increasing order of price?

8. Calculate average age of customers from table customer.

9. List cities of customers from states Maharashtra & Tamil Nadu.

10. Find average price from table product.

11. List all customer nos in the increasing order of quantity from table purchase.

12. Update product number of customer number C00003 to P00008.

13. Find the number of customers from city Delhi.

14. List customer number of all customers who have purchased more than 3 items.

15. Modify the structure of order date field in the purchase into character.

16. Find min and max price from product table.

17. Find number of products by Wipro and HCL separately.

18. List all customers in alphabetical order.

19. Sort the content of purchase table in descending order of date.

20. Delete the product with product_no = P00003

21. Copy the contents of field order_no and orderdate of purchase table into new table.

22. Delete the newly created table.

23. Create view of customer table.

24. List names of customers who have placed more than one order.

25. Retrieve transaction details of customer who lives in same city, obtain the result through self -join and correlated join.

26. Retrieve customer names starting with 'R'.

27. List names of persons who are either a supplier or a customer.