LAB ASSIGNMENT

BscCSIT II (SEM. IV)
DATABASE MANAGEMENT SYSTEM

PRACTICAL LAB ASSIGNMENT: 1

A. Create a relational database that contains the following tables and insert the following data into these tables.

STUD_MEMBER

Roll_No	*FName*	*MName*	*SName*	*Dept_ID*	*Semester*	*Contact_No*	*Gender*
1	Ankur	Samir	Kahar	1	1	272121	M
2	Dhaval	Dhiren	Joshi	1	1	232122	M
3	Ankita	Biren	Shah	1	1	112121	F
10	Komal	Maheshkumar	Pandya	2	3	123123	F
13	Amit	Jitenkumar	Mehta	3	3	453667	M
23	Jinal	Ashish	Gandhi	2	1	323232	M
22	Ganesh	Asha	Patel	2	3	124244	M
4	Shweta	Mihir	Patel	3	1	646342	F
7	Pooja	Mayank	Desai	3	3	328656	F
8	Komal	Krishnaraj	Bhatia	2	3	257422	F
43	Kiran	Viraj	Shah	1	1	754124	F

DEPARTMENT

Dept_ID	*Dept_Name*
1	Information Technology
2	Electrical
3	Civil
4	Mechanical
5	Chemical

B. Now, solve the following SQL Queries.

1. Display the names and contact numbers of all student members.
2. Give the names and roll numbers of all students of Information Technology who are members.
3. Display names of Departments whose students are members.
4. Display names of Departments for which no students are members.
5. Display names of all Departments.
6. Find the number of students of Electrical Department who are members.
7. Display information of student members whose name begins with the letter “A”.
8. Display all details of Male members only.
9. Display data of student members who are currently in semester „3‟.
10. Display data of student female members in alphabetical order.

PRACTICAL LAB ASSIGNMENT (SQL): 2

Table: sales

OrderID	OrderDate	OrderPrice	OrderQuantity	CustomerName
1	12/22/2005	160	2	Smith
2	08/10/2005	190	2	Johnson
3	07/13/2005	500	5	Baldwin
4	07/15/2005	420	2	Smith
5	12/22/2005	1000	4	Wood
6	10/2/2005	820	4	Smith
7	11/03/2005	2000	2	Baldwin

Solve following queries using Aggregate Function for above table:

1. Count how many orders have made a customer with CustomerName of Smith.
2. Find number of unique customers that have ordered from the store.
3. Find out total no. of items ordered by all the customers.
4. Find out average number of items per order.
5. Find out the average OrderQuantity for all orders with OrderPrice greater than 200
6. Find out what was the minimum price paid for any of the orders.
7. Find out the highest OrderPrice from the given sales table
8. List out unique customers‟ name only from the table.
9. List out name of the customers who have given order in the month of DECEMBER
10. Find out the total amount of money spent for each of the customers.
11. Select all unique customers, who have spent more than 1200 in the store.
12. Select all customers that have ordered more than 5 items in total from all their orders.
13. Select all customers who have spent more than 1000, after 10/01/2005.
14. Select orders in increasing order of order price.
15. Select orders in decreasing order of order price.

PRACTICAL LAB ASSIGNMENT (SQL): 3

Table: sales

OrderID	OrderDate	OrderPrice	OrderQuantity	CustomerName
1	12/22/2005	160	2	Smith
2	08/10/2005	190	2	Johnson
3	07/13/2005	500	5	Baldwin
4	07/15/2005	420	2	Smith
5	12/22/2005	1000	4	Wood
6	10/2/2005	820	4	Smith
7	11/03/2005	2000	2	Baldwin
8	12/22/2002	1000	4	Wood
9	12/29/2004	5000	4	Smith

Table: products

Product_id	OrderId	Manufacture_Date	Raw_Material	Vender_id
AZ145	2	12/23/2005	Steel	1
CS784	4	11/28/2005	Plastic	2
AZ147	6	08/15/2002	Steel	3
FD344	3	11/03/2005	Milk	1
GR233	3	11/30/2005	Pulses	2
FD123	2	10/03/2005	Milk	2
CS783	1	11/03/2004	Plastic	2
CS435	5	11/04/2001	Steel	1
GR567	6	09/03/2005	Pulses	2
FD267	5	21/03/2002	Bread	4
FD333	9	12/12/2001	Milk	1

Table: vender_info

Vender_id	Vender_name
1	Smith
2	Wills
3	Johnson
4	Roger

Table: venders

Raw_Material	Venders	Vender_id
Steel	Smith	1
Plastic	Wills	2
Steel	Johnson	3
Milk	Smith	1
Pulses	Wills	2
Bread	Roger	4
Bread	Wills	2
Milk	Wills	2

1. Display product information which are ordered in the same year of its manufacturing year.
2. Display product information which are ordered in the same year of its manufacturing year where vender is „smith".
3. Display total no. of orders placed in each year.
4. Display total no. of orders placed in each year by vender Wills.
5. Display the name of all those persons who are venders and customers both.
6. Display total no. of food items ordered every year.
7. Display total no. of food items ordered every year made from Bread.
8. Display list of product_id whose vender and customer is different.
9. Display all those customers who are ordering products of milk by smith.
10. Display total no. of orders by each vender every year.
11. Display name of those venders whose products are sold more than 2000 Rs. Every year.

PRACTICAL LAB ASSIGNMENT (SQL Exercise): 4

1. Write a simple SQL **script** that displays "Hello World".

2.	Write a SQL **stored procedure** to display "Hello World".
3.	Write a SQL script that performs simple arithmetic like Addition, Subtraction, Multiplication & Division of input numbers.
4.	Create two tables as shown below: Table 1 : product (product_id, product_name, supplier_name, unit_price) Table 2: product_price_history(product_id, product_name, supplier_name, unit_price) Insert appropriate data into Table 1 i.e. the „product" table. Now write a **SQL trigger** that automatically copies a row from product table to product_price_history table whenever the unit price of a product is changed in the product table. Note: „product" table contains new updated value of unit price while „product_price_history" table contains the old value.
5.	Write a SQL script to compare three given numbers and display them in ascending order.
6.	Create the following table:
	Emp(E_ID, E_Name, E_Dept, E_Salary) Insert appropriate data into Emp table. The attribute E_Dept contains values like (I.T. , Accounts, Sales).. Write a **SQL cursor** that increments the salary of employees of I.T. Dept. by 20%.