

LAB MANUAL

DISTRIBUTED DATABASE SYSTEM

Attempt all questions of the lab manual. The lab Manual is submitted in printed form. Lab manual must be submitted in tape binding & ring binding. Lab manual contains 08 marks.

Typing Directions

- Good quality white bond paper of the **size A4 size** must be used.
- One inch broad margin must be on each side except the left side margin which should be **1.25 inch**.
- No header footer used while typing no extra margin should be left within the marked margin.
- **“Times New Roman”** writing font style is the recommended throughout the Lab Manual assignment.
- The main headings font size should be **16** and capital while for the sub heading and general text should be **14 and 12** respectively.

QUESTION # 1:

What is JOIN in SQL? What is JOIN Query syntax? Explain different types of JOIN Quires and its syntax with the help of examples. Also differentiate between SQL UNION and SQL JOIN and Cross JOIN.

QUESTION # 2:

Create a report titled Customer History Report. This report contains each customer’s history of renting videos. Be sure to include the customer name, movie rented, dates of the rental, and duration of rentals. Total the number of rentals for all customers for the reporting period.

Note: Your results may be different.

Thu Sep 27

Customer History Report

page 1

| MEMBER | TITLE | BOOK_DATE | DURATION |
|------------------|--------------------------|-----------|----------|
| Carmen Velasquez | Willie and Christmas Too | 24-SEP-01 | 1 |
| | Alien Again | 26-SEP-01 | |
| | Interstellar Wars | 27-SEP-01 | |
| LaDoris Ngao | My Day Off | 25-SEP-01 | |
| Molly Urguhart | Soda Gang | 23-SEP-01 | 2 |

QUESTION # 3:

Explain Multi-database Query Processing Architecture with the help of diagram. Also explain Distributed DBMS Reliability and Failure in Distributed DBMS.

What are the Reliability Concepts and Measures?

- System, State, and Failure
- Reliability and Availability
- Mean Time between Failures/Mean Time to Repair

What is the Failure in Distributed DBMS?

- Transaction Failures
- Site (System) Failures
- Media Failures
- Communication Failures

Explain Reliability Concepts and Measures and Failure in Distributed DBMS.

QUESTION # 4:

Create table like table 1 and table 2. Create your own table names and attribute names. Must enter 30 plus proper entries.

- Then write a SQL query to find sales people who received commissions of more than 12 percent from the company. Return the name of Customer and city of customer where he belongs and Salesman how sells the product and his commission.
- Then also write a SQL query to find distinct sales people and their cities. Return sales person ID and city. Also draw relational algebra tree for union all the entities.

Sample table: customer

| customer_id | cust_name | city | grade | salesman_id |
|-------------|----------------|------------|-------|-------------|
| 3002 | Nick Rimando | New York | 100 | 5001 |
| 3007 | Brad Davis | New York | 200 | 5001 |
| 3005 | Graham Zusi | California | 200 | 5002 |
| 3008 | Julian Green | London | 300 | 5002 |
| 3004 | Fabian Johnson | Paris | 300 | 5006 |
| 3009 | Geoff Cameron | Berlin | 100 | 5003 |

Table # 1

Sample table: salesman

| salesman_id | name | city | commission |
|-------------|------------|----------|------------|
| 5001 | James Hoog | New York | 0.15 |
| 5002 | Nail Knite | Paris | 0.13 |
| 5005 | Pit Alex | London | 0.11 |
| 5006 | Mc Lyon | Paris | 0.14 |
| 5007 | Paul Adam | Rome | 0.13 |
| 5003 | Lauson Hen | San Jose | 0.12 |

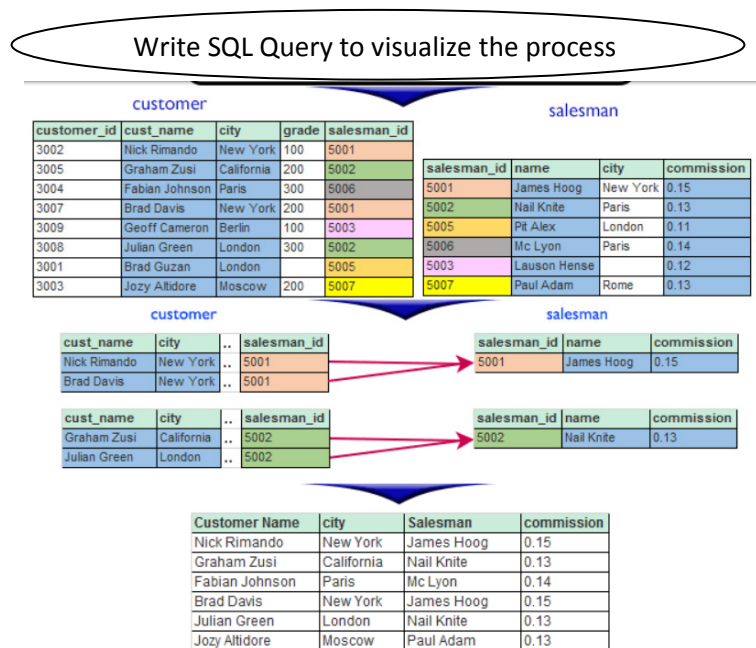
Table # 2

Then output of the query must be like that. For example,

Output of the Query:

| Customer Name | city | Salesman | commission |
|---------------|------------|------------|------------|
| Nick Rimando | New York | James Hoog | 0.15 |
| Brad Davis | New York | James Hoog | 0.15 |
| Graham Zusi | California | Nail Knite | 0.13 |

Show the name of seven plus persons in a table that got the commission 12 percent and more than 12 percent from the company. Explain all the working in detail also visualize the explanations in form of figure.



Visualization and output table

NOTE:

- Submission Date of Lab Manual Assignment is **14-07-2023 (FRIDAY)**.
- Class CR GR collects the data and submits to me.
- No one allow submitting after due date and time.
- Log/code file submit in soft form. No need to take print the log/code file.
- All files submit in both formats **HARD COPY AND SOFT COPY**.

GOOD LUCK