



NITTE
EDUCATION TRUST

N.M.A.M. INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)

Nitte – 574 110, Karnataka, India

(ISO 9001:2015 Certified), Accredited with 'A' Grade by NAAC

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Department of Computer Science and Engineering

B.E. CSE Program Accredited by NBA, New Delhi from 1-7-2018 to 30-6-2021

LAB QUESTIONS FOR DATABASE MANAGEMENT SYSTEMS LAB (19CS506)

MARK DISTRIBUTION

Table creation and value insertion	Viva	Query 1	Query 2	Query 3
10	10	10	10	10

Note:

1. Create the tables by properly specifying the primary keys and the foreign keys.
2. Enter at least four tuples for each relation

I. Insurance Database

Consider the Insurance database given below.

PERSON (driver-id #: String, name: string, address: string)

CAR (regno#: string, model: string, year: int)

ACCIDENT (report-number#: int, accd-date: date, location: string)

OWNS (driver-id #: string, regno#: string)

PARTICIPATED (driver-id#: string, Regno#: string, report-number#: int, damage amount: int)

1. Find the total number of people who owned cars that were involved in accidents in 1989.
2. Find the number of accidents in which the cars belonging to “John Smith” were involved.
3. Update the damage amount for the car with reg number “KA-12” in the accident with report number “1” to \$3000

II. Order Database

Consider the following relations for an order processing database application in a company:

CUSTOMER (cust #: int, cname: string, city: string)

ORDER (order #: int, odate: date, cust : int, ord-Amt: int)

ORDER – ITEM (order #: int, item #: int, qty: int)

ITEM (item #: int, unit price: int)

SHIPMENT (order #: int, warehouse#: int, ship-date: date)

WAREHOUSE (warehouse #: int, city: string)

1. Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total numbers of orders by the customer and the last column is the average order amount for that customer.
2. For each item that has more than two orders , list the item, number of orders that are shipped from atleast two warehouses and total quantity of items shipped.
3. List the customers who have ordered for every item that the company produces.



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III. Consider the following database of student enrollment in courses & books adopted for each course:

STUDENT (regno#: string, name: string, major: string, bdate: date)

COURSE (course #: int, cname: string, dept: string)

ENROLL (regno#: string, course#: int, sem#: int marks: int)

BOOK _ ADOPTION (course#: int, sem#: int, book-ISBN#: int)

TEXT (book-ISBN#: int, book-title: string, publisher: string, author: string)

1. Produce a list of text books (include Course #, Book-ISBN, Book-title) in the alphabetical order for courses offered by the 'CS' department that use more than two books.
2. List any department that has all its adopted books published by a specific publisher.
3. List the book ISBNs and book titles of the department that has maximum number of students.

VI. The following tables are maintained by a book dealer:

AUTHOR (author-id#: int, name: string, city: string, country: string)

PUBLISHER (publisher-id#: int, name: string, city: string, country: string)

CATALOG (book-id#: int, title: string, author-id: int, publisher-id: int, category-id: int, year: int, price: int)

CATEGORY (category-id#: int, description: string)

ORDER-DETAILS (order-no#: int, book-id#: int, quantity: int)

1. Find the author of the book which has maximum sales.
2. Increase the price of the books published by a specific publisher by 10%.
3. Find the number of orders for the book that has minimum sales.

V. Consider the following database for a banking enterprise:

BRANCH (branch-name#: string, branch-city: string, assets: real)

ACCOUNT (accno#: int, branch-name: string, balance: real)

DEPOSITOR (customer-name#: string, accno#: int)

CUSTOMER (customer-name#: string, customer-street: string, customer-city: string)

LOAN (loan-number#: int, branch-name: string, amount: real)

BORROWER (customer-name#: string, loan-number#: int)

1. Find all the customers who have atleast 2 accounts at all the branches located in a specific city. WE
2. Find all the customers who have accounts in atleast 1 branch located in all the cities. WE
3. Find all the customers who have accounts in atleast 2 branches located in a specific city. E