

Vidya Jyothi Institute of Technology

Department of Computer Science and Engineering

II year II sem

Data Base Management Systems Lab

LIST OF EXPERIMENTS

1. Database Schema for a customer-sale scenario

Customer (**Cust id : integer**, cust_name: string)

Item (**item id: integer**, item_name: string, price: integer)

Sale (**bill no: integer**, bill_data: date, **cust_id: integer**, **item_id: integer**, qty sold: integer)

For the above schema, perform the following.

- a. Create the tables with the appropriate integrity constraints.
- b. Insert around 10 records in each of the tables
- c. List all the bills for the current date with the customer names and item numbers
- d. List the total Bill details with the quantity sold, price of the item and the final amount
- e. List the details of the customer who have bought a product which has a price > 200.
- f. Give a count of how many products have been bought by each customer
- g. Give a list of products bought by a customer having cust_id as 5.
- h. List the item details which are sold as of today
- i. Create a view which lists out the bill_no, bill_date, cust_id, item_id, price, qty_sold, amount.
- j. Create a view which lists the daily sales date wise for the last one week

2. Database Schema for a Student Library scenario

Student (**Stud no : integer**, Stud_name: string)

Membership (**Mem no: integer**, Stud_no: integer)

Book (**book no: integer**, book_name: string, author: string)

Iss_rec (**iss no: integer**, iss_date: date, **Mem no: integer**, **book no: integer**)

For the above schema, perform the following.

- a. Create the tables with the appropriate integrity constraints.
- b. Insert around 10 records in each of the tables.
- c. List all the student names with their membership numbers
- d. List all the issues for the current date with student and Book names
- e. List the details of students who borrowed book whose author is KORTH.
- f. Give a count of how many books have been bought by each student.
- g. Give a list of books taken by student with stud_no as 5.
- h. List the book details which are issued as of today.
- i. Create a view which lists out the iss_no, iss_date, stud_name, book name

j. Create a view which lists the daily issues-date wise for the last one week

3. Database Schema for a Employee-payscenario

Employee (**emp_id**:integer,emp_name:string)

Department (**dept_id**:integer,dept_name:string)

Paydetails (**emp_id : integer,dept_id: integer**, basic: integer, deductions: integer, additions: integer, DOJ: date)

Payroll (**emp_id : integer**, pay_date: date)

For the above schema, perform the following.

- a. Create the tables with the appropriate integrity constraints.
- b. Insert around 10 records in each of the tables.
- c. List the employee details departmentwise.
- d. List all the employee names who joined after particular date.
- e. List the details of employees whose basic salary is between 50,000 and 1,00,000
- f. Give a count of how many employees are working in each department.
- g. Give a name of the employees whose net salary > 1,00,000.
- h. List the details for an employee_id=5
- i. Create a view which lists out the emp_name, department, basic, deductions, net salary.
- j. Create a view which lists the emp_name and his net salary.

4. Database Schema for a Video Library scenario

Customer (**cust_no: integer**,cust_name: string)

Membership (**Mem_no: integer**, cust_no: integer)

Cassette (**cass_no:integer**, cass_name:string, Language:String)

Iss_rec(**iss_no: integer**, iss_date: date, **mem_no: integer**, **cass_no: integer**)

For the above schema, perform the following.

- a. Create the tables with the appropriate integrity constraints
- b. Insert around 10 records in each of the tables.
- c. List all the customer names with their membership numbers
- d. List all the issues for the current date with the customer names and cassette names
- e. List the details of the customer who has borrowed the cassette whose title is —The Legend
- f. Give a count of how many cassettes have been borrowed by each customer.
- g. Give a list of cassettes which has been taken by the Customer with mem_no as 5
- h. List the cassettes issues for today.
- i. Create a view which lists out the iss_no, iss_date, cust_name, cass_name
- j. Create a view which lists issues-date wise for the last one week

5. Database Schema for a student-Lab scenario

Student (**stud_no: integer**, stud_name: string, **class: string**)

Class (**class: string**, **descrip: string**)

Lab (**mach_no: integer**, Lab no: integer, description: String)

Allotment (**Stud_no: Integer**, **mach_no: integer**, **day of week: string**)

For the above schema, perform the following.

- a. Create the tables with the appropriate integrity constraints.
- b. Insert around 10 records in each of the tables.

- c. List all the machine allotments with the student names, lab and machine numbers
 - d. List the total number of lab allotments daywise.
 - e. Give a count of how many machines have been allocated to the 'CSE' class
 - f. Give a machine allotment details of the stud_no 5 with his personal and class details.
 - g. Count for how many machines have been allocated in **Lab_no 1** for the day of the week as —Monday
 - h. How many students class wise have allocated machines in the labs.
 - i. Create a view which lists out the stud_no, stud_name, mach_no, lab_no, day of week.
 - j. Create a view which lists the machine allotment details for —Thursday.
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- 6. **Create a procedure to find reverse of a given number.**
 - 7. **Create a procedure to update the salaries of all employees as per the given data.**
 - 8. **Create a procedure to demonstrate IN, OUT and INOUT parameters.**
 - 9. **Create a function to check whether given string is palindrome or not.**
 - 10. **Create a function to find sum of salaries of all employees working in department number 10.**
 - 11. **Create a trigger before/after update on employee table for each row/statement.**
 - 12. **Create a trigger before/after delete on employee table for each row/statement.**
 - 13. **Create a trigger before/after insert on employee table for each row/statement.**