# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## II Year-II Sem

#### **DBMS Lab**

## LIST OF EXPERIMENTS

#### 1. Database Schema for a customer-sale scenario

Customer (<u>Cust id: integer</u>, cust\_name: string)Item (<u>item\_id: integer</u>, item\_name: string, price: integer) Sale (<u>bill\_no: integer</u>, 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(<u>Stud\_no : integer</u>,Stud\_name: string) Membership(<u>Mem\_no: integer</u>,Stud\_no: integer) Book(<u>book\_no: integer</u>, 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 CJDATE
- 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-pay scenario

Employee(emp\_id:integer,emp\_name:string)department(dept\_id:

<u>integer</u>,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 department wise
- d) List all the employee names who joined after particular date
- e) List the details of employees whose basic salary is between 10,000 and 20,000
- f) Give a count of how many employees are working in each department
- g) Give a names of the employees whose netsalary>10,000
- h) List the details for an employee\_id=5
- i) Create a view which lists out the emp\_name, department, basic, dedeuctions,

#### netsalary

Create a view which lists the emp\_name and his netsalary4. **Database Schema** for a Video Library scenario Customer (cust\_no: nteger,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 book which has been taken by the student with mem\_no as 5
- h) List the cassettes issues for today
- i) Create a view which lists outs the iss\_no, iss\_date, cust\_name, cass\_name
- i) 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(<u>mach\_no: integer</u>, Lab\_no: integer, description: String)

Allotment(Stud\_no: Integer, mach\_no: integer, dayof 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 day wise
- 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, dayofweek
- j)Create a view which lists the machine allotment details for "Thursday
- 6. Create a cursor, which displays all employee numbers and names from the EMP table
- 7. Create a cursor, which update the salaries of all employees as per the given data
- 8. Create a cursor, which displays names of employees having salary > 50000
- 9. Create a procedure to find reverse of a given number
- 10. Create a procedure to update the salaries of all employees as per the given data
- 11. Create a procedure to demonstrate IN, OUT and INOUT parameters
- 12. Create a function to check whether given string is palindrome or not.
- 13. Create a function to find sum of salaries of all employees working in depart number 10
- 14. Create a trigger before/after update on employee table for each row/statement
- 15. Create a trigger before/after delete on employee table for each row/statement
- 16. Create a trigger before/after insert on employee table for each row/statement