Chit No: 1 SPPU DBMS LAB

Problem Statement: Design and Develop SQL DDL statements on Schema given.Schema:

employee_master (emp_id,first name,middle,last name,department,manager id.)branch_master (branch id ,branch name)

1. Insert records in branch_master
2. Insert records in employee_master.
3. Create index on emp_name column of employee_master.
4. Create a view containing employee details

Chit No: 2 SPPU DBMS LAB

Problem Statement: Design following SQL DML statements:

Create a university/college database containing following tables-

Student (stud_id, deptnm, sem, name, yr, credits)

Teaches (teacher_id, teacher_name, salary, deptnm)

1. Insert records into all tables.
2. Update record on student tables as department name comp to IT.
3. Find the department that has highest or average salary
4. Delete the records of all teacher with salary below 2000.
5. Find the sum of salary of each department.

Chit No: 3 SPPU DBMS LAB

Emp(empId int ,empName varchar(10),empSal int ,empDeptId int)

Dept(deptId int, deptName varchar(10))

Set appropriate primary key and Foreign key.

1. Create table Emp(empID) and Dept(deptID).
2. Add Not Null constraint to empName.
3. Insert few Records.
4. Add Unique to deptLoc.
5. Add column deptloc varchar (10) to dept table

Chit No: 4 SPPU DBMS LAB

Emp (empId int, empName varchar (10), empSal int, empDeptId int)

Dept(deptId int, deptName varchar(10))

1. Insert few Record.
2. List employees belonging to department 30, 40, or 10
3. List the employee details whose salary is between 10000 to 30000.
4. List total no of employee.
5. List average sal of each deptID.
6. List employee details in ascending order of salary.

Chit No: 5 SPPU DBMS LAB

employee (employee-name, street, city), works (employee-name, company-name, salary), company (company-name, city), manages (employee-name, manager-name)

1. Create above tables and insert 5 rows in each table.
2. Find the names, street address, and cities of residence for all employees who work for 'First Bank Corporation' and earn more than $10,000.
3. Find the names of all employees in the database who live in the same cities as the companies for which they work.
4. Find average salary of employees of ‘First Bank Corporation’.
5. Give employees of ‘First Bank Corporation’ 15% rise if salary is less than 20000.

Chit No: 6 SPPU DBMS LAB

employee (employee-name, street, city), works (employee-name, company-name, salary), company (company-name, city), manages (employee-name, manager-name)

1. Create above tables and insert 5 rows in each table.
2. List employees from ‘First Bank Corporation’ that earn salary more than all employees of ‘Small Bank Corporation’.
3. Create a view that will display employee details along with name of his/her manager.
4. Display employee details that live in cities Pune, Mumbai, and Nasik.
5. Give employees of ‘First Bank Corporation’ 15% rise if salary is less than 20000.

Chit No: 7 SPPU DBMS LAB

Stored Procedure : create stored procedure to calculate fine of students.

1. Borrower (Roll_no, Name, DateofIssue, NameofBook, Status)

2. Fine(Roll_no,Date,Amt)

- Accept Roll_no and Name of Book from user.
- Check the number of days (from date of issue).
- If days are between 15 to 30 then fine amount will be Rs. 5 per day.
- If no. of days > 30, per day fine will be Rs 50 per day and for days less than 30, Rs. 5per day.
- After submitting the book, status will change from I to R.
- If condition of fine is true, then details will be stored into fine table.
- Also handles the exception by named exception handler

Chit No: 8 SPPU DBMS LAB

Write a Stored Procedure namely proc_Grade for the categorization of student.

If marks scored by students in examination is <=1500 and marks>=990 then student will be placed in distinction category if marks scored are between 989 and 900 category is first class, if marks 899 and 825 category is Higher Second Class.

Stud_Marks (RollNo, name, total_marks)

Result (RollNo, Name, Class)

Chit No: 9 SPPU DBMS LAB

Cursors: Write a PL/SQL block of code using Explicit Cursor

College has decided to mark all those students detained (D) who are having attendance less than 75%.
Whenever such update takes place, a record for the same is maintained in the d_stud table.
Stud (roll number (4), att number (4), status varchar (1));
d_stud (roll number (4), att number (4));

Chit No: 10 SPPU DBMS LAB

Cursors: Write a PL/SQL block of code using parameterized Cursor

that will merge the data available in the newly created table N_RollCall (roll number (10), name varchar (10)) with the data available in the table O_RollCall (roll number (10), name varchar (10)).

If the data in the first table already exist in the second table, then that data should be skipped.

Chit No: 11 SPPU DBMS LAB

Database Trigger (After update and After delete)

Write a database trigger on borrower (Rollin int, name varchar (30), dateofissue date, nameofbook varchar (30), status char (10)).
The System should keep track of the records thatare being updated or deleted. The old value of updated or deleted records should be added in the Library_Audit (Rollin int, name char (10), dateofissue date, nameofbook char (10), status char, ts timestamp)

Chit No: 12 SPPU DBMS LAB

Database Connectivity:

Write a program to implement MySQL/Oracle database connectivity with any front endlanguage to implement Database navigation operations (add, delete, edit etc.)

Chit No: 13 SPPU DBMS LAB

Create a collection Student in MongoDB (stud_id, stud_name, dept_name, marks)

1. Insert few documents in collection.
2. Find students having marks greater than 50.
3. Find students having marks between 50 and 80.
4. Find students having marks more than 60 from ‘Computer’ department.
5. Update marks of all students from ‘Civil’ department. Set marks to 30. (Use update ())
6. Delete students from ‘Chemical’ department having marks less than 30

Chit No: 14 SPPU DBMS LAB

Create a collection Employee in MongoDB (emp_id, emp_name, dept_name, sal)

1. Insert few documents in collection.
2. Find employees having salary greater than 50000
3. Find employees having salary between 50000 and 80000
4. Find employees having salary more than 60000 from ‘HR’ department
5. Update salaries of all employees from ‘HR’ department. Set salary to 50000, and add new field increment with value 10% for all employees in HR department. (Use save ())
6. Delete employees from ‘Finance’ department having salary less than 10000.

Chit No: 15 SPPU DBMS LAB

Create a collection Book in MongoDB (Title, Description, Author, Publisher, URL, no_of_likes)

1. Add documents in collection.
2. Display all documents in collection.
3. Display a list stating how many books are written by each author.
4. Calculate the sum of no_of_likes from all documents in the collection for each Author.
5. Calculates the average of no_of_likes from all documents in the collection for each Author.

Chit No: 16 SPPU DBMS LAB

Create a collection Book in MongoDB (Title, Description, Author, Publisher, URL, no_of_likes)

1. Add documents in collection.
2. Display all documents in collection.
3. Display a list stating how many books are published by each Publisher.
4. Gets the minimum of no_of_likes from all documents in the collection for each Author.
5. Gets the maximum of no_of_likes from all documents in the collection for each Author.

Chit No: 17 SPPU DBMS LAB

Create a collection Bank in MongoDB and insert few documents with fields (cust_id, cust_name, branch, balance) Write a MapReduce function to display balance in each branch of the bank.

Chit No: 18 SPPU DBMS LAB

Write a program to implement MongoDB database connectivity with any front end language to implement Database navigation operations (add, delete, edit etc.)

Chit No: 19 SPPU DBMS LAB

Demonstrate all types of JOIN on following schemacustomer

(customer_id, first_name)

orders (order_id, amount, customer_id)

Chit No: 20 SPPU DBMS LAB

Create ER diagram for College Database with following entity sets {Student, Course, Professor) and Record their relationship with each other including mapping cardinality and constraints and create the table for above schema.