S.No	Question
1	Q 1. Consider the following three tables. EMPLOYEE(empno, name, deptno,job,hiredate, sal , comission, dob, city , phone) DEPARTMENT(deptno, dname, manager,loc) SALARY(eno, basic,HR,DA,tax). Write equivalent SQL for the following query. (Use foreign key to join the tables.) 1) Get the name and city of the employee working for the accounting department? 2) Get the name, department name of all the employees whose pay is greater than 10000. 3) Get the name of the employee in ascending and descending order. 4) Update the city of the employee no.2 from Mumbai to Delhi. 5) Get the sum of the basic salary of the employees belongs to Delhi city. 6) Get the details of the highest income tax payee. 7) Which employee is the senior most? 8) Give the details of second highest salary employee (without use of 9) Give the details of second highest salary employee (without use of max and limit operator). 10) Give the details of second highest salary employee (with the use of MINUS operator). 11) Give the details of all employees of 5th highest salary (or nth highest salary). 12) How many clerks are there in the company? 13) Which department has exactly one employee as clerk? 14) Which department has the highest number of clerks? Show the deptno and count. 15) How many employees are there in each department? 16) List the lowest salary for different jobs used in a company and list them in descending order. 17) Which department average salary is the lowest among all? Show the deptno,average salary. 18) List the minimum, maximum and average salary for each job. 19) Compute the difference between maximum and minimum salary. 20) List the names of the employees whose name contains LA. 21) List the names of the employees whose joining date is between 2nd April,1981 and 8th Sept,1981. 22) How many different job titles exist in the employee table? 23) Compute the sum of all salaries of employee working under deptno=30. 24) For each salesman in the emp table retrieve the deptno and department name. 25) List the names of all the employees with their name of the manager. 26) List all employees who are working in department located at CHICAGO.

27) List all the employees who are working in same department as their managers.
28) Retrieve all the employees who are working in deptno=10 and who earn salary atleast as much as any employee working in deptno=30.
29) List all the department who have no employees
30) Delete the EC department.

NOTE: Each table name end with your roll no. e.g. roll no is 11CSS23 then table name should be Employee123.

2

Q 1. Write a function and a stored procedure to print Hello ! How are you?.
Q 2. Write a function and a stored procedure to count the number of employees in the table employee.
Q 3. Write a function and a stored procedure to calculate the factorial of the given number.
Q 4. Write a function and a stored procedure to calculate the average of
three numbers.
Q5. Write a function and stored procedure to find fibonacci series and its sum.

3

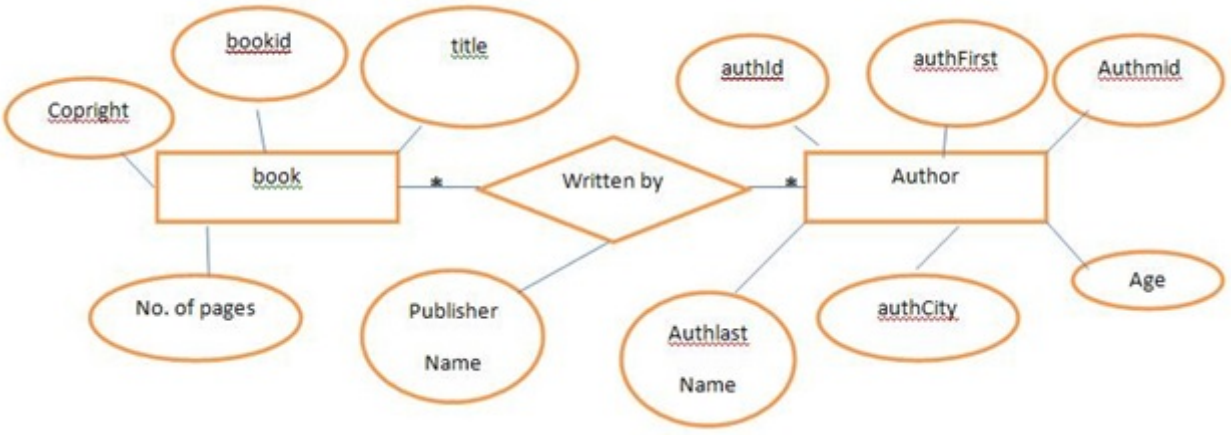
Consider the following relations
Student (snum : integer ,sname:string,major :string,level : string,age :integer).,
Class (name: string, meets_at: time, room: string, fid: integer).
Enrolled (snum: integer, cname:string).Faculty (fid: intger, fname: st ring, deptid: integer);

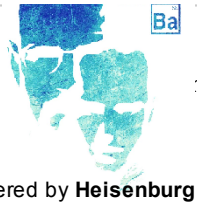
Enrolled has on record per student-class pair such that the student is enrolled in the class.

Write the SQL queries. No duplicates should be printed.(use foreign ke y)

1. Find the names of all Juniors (level = JR) who are enrolled in a class taught by I. Teach.
2. Find the age of the oldest student who is either a History maj or or enrolled in a course taught by I. Teach.
3. Find the names of all classes that either meet in room BA1080 or have 2 or more students enrolled.
4. Find the names of all students who are enrolled in two classes that meet at the same time.
5. Find the names of faculty members who teach in every room in w hich some class is taught.
6. Find the names of faculty members for whom the combined enroll ment of the courses that they teach is less than five.
7. For each level, print the level and the average age of student s for that level.
8. For all levels except JR, print the level and the average age of students for that level.
9. For each faculty member that has taught classes only in room R 128, print the faculty members name and the total number of classes sh e or he has taught.
10. Find the names of students enrolled in the maximum number of c lasses.

4





Write equivalent SQL for the following query.

1. Get the title,author name,publisher n ıor whose city contain total no of a=2?
2. Give the details of the book which is at least two authors.
3. Write a stored procedure (SP Name : insertIntoAuth) to insert the Author information.
4. Write a stored procedure (SP Name : insertBookInfo) to insert the book information such as bookid, title, no. of pages, copyright, authorId, Publisher Name. (Use two stored procedure and call it from one stored procedure i.e nested SP). (SP Name : insertBook, insertWBy).
5. Write a stored procedure to delete the Author information using its AuthID. (Notr: If Author book(in Book Table) exists for AuthID, then it should display message as You cant delete Author because total no book exist in BookTable. First delete all the books written by him).
6. Write a stored procedure to delete the Book using AuthID.

NOTE: Book information should be deleted from both Book and Book_writtenBy_Author table.

Book ID Already exist when we insert Book with same id.

Author of given ID does not exist when we enter wrong AuthID in insertBookInfo, insertBook stored procedure.

Author ID already exist when we insert duplicate AuthID in insertIntoAuth stored procedure.

Age Should be greater than 18 and less than 60' if age is invalid (Age data type should be DATE). Use function to validate the age in stored procedure. Function Name : AgeValidate .

5

Create function that validate the age of employee. Function accept the dob of employee and return 1 if age is lies between 18 and 60 else return 0

6

Consider a following table of a database :
Book(bid, bname,authrname)

1. Create triggers which create a log of every Insert ,Delete and Update operation on the book table record.
It should also hold the username who was operating at that time and time and type of operation.

NOTE: log table attributes are user, operation, pbid, pbname, pauthname, nbid, nbname, nauthname and timeofop

7

DBMS LAB Assignment :
1. DBMS File in soft copy
2. File contains solution of all question done in lab.
3. Screenshot of Solution(for each questions)
4. Table name end with your roll number e.g if roll no. is 12CSS55 then table name should be employee1255
5. Question Set solution will be given on 26-09-14
6. DBMS LAB file submission on or before 20 November 2014
7. Final Project on or before 13 November 2014

NOTE: Those student who submit project before the deadline will get the extra marks in lab

S.No Solution

Refresh (/dbms/index.php/student)