Sister Nivedita University
Department of Computer Science and Engineering
<u>DATABASE MANAGEMENT SYSTEM LAB</u>
ASSIGNMENT 8

- **Create the following tables with appropriate constraints using SQL command.**

A) Table Name : <u>Member</u>

COLUMN NAME	DATA TYPE	DESCRIPTION
Member_Id	Number(5)	Unique Member ID
Member_Name	Varchar2(30)	Name of the Library member
Member_address	Varchar2(50)	Address of the member
Acc_Open_Date	Date	Date of membership
Membership_type	Varchar2(20)	Type of the membership such as 'Lifetime',' Annual', 'Half Yearly',' Quarterly'
Fees_paid	Number(4)	Membership fees paid
Max_Books_Allowed	Number(2)	Total Number of books that can be issued to the member.
Penalty_Amount	Number(7,2)	Penalty amount due

CONSTRAINT:

    a. Member_Id – Primary Key
    b. Member_Name – NOT NULL
    c. Membership_type - 'Lifetime',' Annual', 'Half Yearly',' Quarterly'
    d. Max_books_allowed <7
    e. Penalty_amt maximum 1000

B) Table Name : <u>BOOKS</u>

COLUMN NAME	DATA TYPE	DESCRIPTION
Book_No	Number(6)	Book identification number
Book_Name	VarChar2(30)	Name of the book
Author_name	Varchar2(30)	Author of the book
Cost	Number(7,2)	Cost of the book
Category	Char(10)	Category like Science , Fiction etc.

CONSTRAINT:

    a. Book_No – Primary Key
    b. Book_Name – Not Null
    c. Category – Science, Database, System, Others.

C) Table Name : <u>ISSUE</u>

COLUMN NAME	DATA TYPE	DESCRIPTION
Lib_Issue_Id	Number(10)	Library Book Issue No
Book_No	Number(6)	The ID of book, which is issued
Member_Id	Number(5)	Member that issued the book
Issue_Date	Date	Date of Issue
Return_date	Date	Return date

CONSTRAINT:

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a. Lib_Issue_Id -Primary key
b. Book_No - foreign key
c. Member_id - foreign key

➢ **Insert the following data to the appropriate table using SQL command.**
  A. **Table Name : __Member__**

MEMBER_ID	MEMBER_NAME	MEMBER_ADDRESS	ACC_OPEN_DATE	MEMBERSHIP_TYPE	FEES_PAID	MAX_BOOKS_ALLOWED	PENALTY_AMOUNT
1	Sayantan Sinha	Pune	10-Dec-10	Lifetime	2000	6	50
2	Abhirup Sarkar	Kolkata	19-jan-11	Annual	1400	3	0
3	Ritesh Bhuniya	Gujarat	20-feb-11	Quarterly	350	2	100
4	Paresh sen	Tripura	21-mar-11	Half yearly	700	1	200
5	Sohini Haldar	Birbhum	11-apr-11	Lifetime	2000	6	10
6	Suparna Biswas	Kolkata	12-apr-11	Half Yearly	700	1	0
7	Suranjana Basu	Purulia	30-june-11	Annual	1400	3	50
8	Arpita Roy	Kolkata	31-july-11	Half yearly	700	1	0

  B. **Table Name : __BOOKS__**

BOOK_NO	BOOK_NAME	AUTHOR_NAME	COST	CATEGORY
101	Let us C	Denis Ritchie	450	Others
102	Oracle – Complete Ref	Loni	550	Database
103	Visual Basic 10	BPB	700	Others
104	Mastering SQL	Loni	450	Database
105	PL SQL-Ref	Scott Urman	750	Database
106	UNIX	Sumitava Das	300	System
107	Optics	Ghatak	600	Science
108	Data Structure	G.S. Baluja	350	Others

  C. **Table Name : __ISSUE__**

LIB_ISSUE_ID	BOOK_NO	MEMBER_ID	ISSUE_DATE	RETURN_DATE
7001	101	1	10-jan-11	
7002	102	2	25-jan-11	
7003	104	1	1-Feb-11	
7004	104	2	15-Mar-11	
7005	101	4	04-Apr-11	
7006	108	5	12-apr-11	
7007	101	8	1-Aug-11	

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1) Write a PL/SQL program where take input of two numbers and display the largest number.

2) Write a PL/SQL program where take input of any number and display whether it is even or odd.

3) Write a PL/SQL program where take input of any number and find factorial of the given number.

4) Write a PL/SQL program where check a year leap year or not. Take a year as user input and check it is leap year or not.

5) Write a PL/SQL program where take a string as input and print the reverse of it.

6) Create a table named CIRCLE with two attributes RADIUS number (3) and AREA number(10,3), then write a PL/SQL program which can calculate area for every radius up to 10 and insert into the table. (Use while and for loop individually).

7) Write a PL/SQL program which can update cost value of corresponding book number of the BOOKS_COPY Table.

   ✓ INPUT: BOOK_NO, NEW COST,

   ✓ CONDITION: Old cost value will less than 450 and new cost value will less

      Than900 otherwise provide an error massage.

8) Write a PL/SQL Program which take MEMBER_ID as input and provide the corresponding MEMBER_NAME, MEMBER_ADDRESS AND FEES PAID.

9) Write a PL/SQL program which can take a String as an input and display it without any space and also count the no of space available in the input string.

10) Take an input of any string and display each word in a separate line.

11) Take an input of any Member Number and display the Member Name in upper case and lower case.