

**DBMS LAB**  
**FIRST ASSIGNMENT ON SQL**

**CO1: Design the database and interact with database using structured query language**

1. Create the following tables :

**(Only primary key constraint can be used. Do not use any foreign key/referential integrity or any other constraint)**

Tablename: EMP

Structure :

EMP_CODE	char(5)
EMP_NAME	char(20)
DEPT_CODE	char(5)
DESIG_CODE	char(5)
SEX	char(1)
ADDRESS	char (25)
CITY	char (20)
STATE	char (20)
PIN	char (6)
BASIC	Number
JN_DT	Date

Primary key is EMP\_CODE

Tablename : DESIGNATION

Structure:

DESIG_CODE	char(5)
DESIG_DESC	char(20)

Primary key is DESIG\_CODE

Table name: DEPARTMENT

Structure:

DEPT_CODE	char(5)
DEPT_NAME	char(15)

Primary key is DEPT\_CODE.

2. Display the structure of each table.

3. Insert few rows in each table.

[While entering data in EMP table, use DESIG\_CODE which is existing in DESIGNATION table and DEPT\_CODE which is existing in DEPARTMENT table. In DESIGNATION table, assign code for Manager, Executive, officer, clerk and helper. In DEPARTMENT table, assign code for Personnel, Production, Purchase, Finance, Research departments]

4. In EMP table insert few rows without DEPT\_CODE and BASIC.

5. Find the rows with unassigned DEPT\_CODE.

6. Find the rows with BASIC equal to zero

7. Find the rows with unassigned Basic [note down the difference between the results obtained in Q.6 and Q.7]

8. Find the average basic of the employees.
9. Replace the BASIC with 0 for the rows with unassigned Basic .
10. Again , find the average Basic . (Note the difference of result obtained in Q.8 & Q.10.)
- 11.Delete the rows with unassigned DEPT\_CODE .
12. Say, Net pay of an employee= Basic+HRA+DA where HRA is 50% of the Basic & DA is 40% of Basic. Show the employee name & Net pay for all employees.
13. Show the EMP\_NAME & BASIC in the ascending order of DEPT\_CODE. The employee name must appear in uppercase .
14. Find the employees who have joined after 1<sup>st</sup> January 1990.
15. Find, how many employees have joined in the month of January?
16. Find the maximum & minimum Basic.
17. Find how many Female employees are there?
18. Replace CITY with existing value converted into uppercase for all rows.
19. Find in how many different cities various employees are residing?
20. Display the employee information in the ascending order of DEPT\_CODE and with in a Department, it should be in the descending order of BASIC .