



## **DBMS LAB**

### **LAB ASSIGNMENTS**

#### **Week 5**

► Defining constraints + NOT NULL constraint + UNIQUE constraint +  
PRIMARY KEY constraint + FOREIGN KEY constraint + CHECK constraint

1. Create the table MYEMP1 (with the following structure) in Oracle RDBMS.

<i>Column Name</i>	<b>ENO</b>	<b>ENAME</b>	<b>PAN</b>	<b>JOB</b>	<b>MGR</b>	<b>SAL</b>	<b>DNO</b>
<i>Data Type</i>	<b>Numeric</b>	<b>Alphanumeric</b>	<b>Alphanumeric</b>	<b>Alphanumeric</b>	<b>Numeric</b>	<b>Numeric</b>	<b>Numeric</b>
<i>Maximum Width</i>	<b>4</b>	<b>20</b>		<b>10</b>	<b>4</b>	<b>5</b>	<b>2</b>
<i>Nullity</i>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<i>Primary Key</i>	<b>Yes</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Check</i>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<i>Unique</i>	<b>-</b>	<b>-</b>	<b>Yes</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

- a) Add bonus Column to myemp1 table. Take bonus as of type number with size 10.
  - b) Alter table to add check constraint. Example: Add check constraint with name bonus\_ck to check bonus given to every employee should not exceed salary.
2. a) Create a table **Depart** with the columns dept\_id, dept\_name, location\_name where dept\_id is primary key.
- b) Create another table **Employ** with the columns empid, name, salary, address, hire\_date, department\_no where empid is primary key.
- Make a referential integrity between department\_no and dept\_id. Also make sure that salary must contain some values in all rows and each department's name is different.

- Give appropriate names to all the constraints being imposed on both the tables. Insert at least 3 rows in departments table. Insert at least 5 rows in the employees table with different department names.
3. a) Create a table **Departments** with the columns dept\_id, dept\_name, loc\_name where dept\_id is primary key.  
b) Create other table **locations** with the columns location\_id, location\_name, area where location\_id is primary key.
    - Ensure that location\_name acts as another candidate key of the locations table. Make a referential integrity between loc\_name of departments table and location\_name of locations table.
    - Ensure that dept\_name should starts with 'C'
    - Give appropriate names to all the constraints being imposed on the tables. Insert at least three rows in both the tables.
  4. a) Create a table Employees with the columns empid, name, salary, address, hire\_date, mgr\_no,dept\_name where empid is primary key.
    - Make a referential integrity between emp\_id and mgr\_no.
    - Give appropriate names to all the constraints being imposed on the tables. Insert at least 10 rows in the employees table with different department names (Make one department name BCA).