Course :   **CSE 2004 – Database Management Systems**

Lab slot :   **L55+ L56**

Faculty :   **Dr. B Saleena**

Ex. No: 1   **Date: 14/7/17**

SQL - DDL & DML Commands (Insert & Select)

Creating table: Employee

SQL> CREATE TABLE Employee

 2   (Name varchar(20), SSN_Num number, Birth_date date, Address varchar(50), Salary number, Department_num number);

Table created.

SQL> DESCRIBE Employee

Name   Null?   Type

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 NAME   VARCHAR2(20)

 SSN_NUM   NUMBER

 BIRTH_DATE   DATE

 ADDRESS   VARCHAR2(50)

 SALARY   NUMBER

 DEPARTMENT_NUM   NUMBER

Creating table: Department

SQL> CREATE TABLE Department

 2 (Department_name varchar(20), Department_num number);

Table created.

SQL> DESCRIBE Department;

Name   Null?   Type

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 DEPARTMENT_NAME   VARCHAR2(20)

 DEPARTMENT_NUM   NUMBER

1. **Insert a minimum of 5 records into the employee and department tables. (Insert multiple records at a time)**

   SQL> INSERT INTO Employee (Name, SSN_Num, Birth_date, Address, Salary, Department_num)

     2 SELECT 'Dhruv Garg', 3349, '02-Jul-1988', 'Silicon Valley', 15500, 4 FROM DUAL

     3 UNION ALL SELECT 'Aditya Chitlangia', 3212, '27-Nov-1982', 'New York', 20000, 2 FROM DUAL

     4 UNION ALL SELECT 'Raagul Nagendran', 2948, '16-May-1980', 'London', 8200, 1 FROM DUAL

     5 UNION ALL SELECT 'Aakash Tiwari', 3206, '06-Aug-1975', 'Washington D.C.', 21600, 5 FROM DUAL

     6 UNION ALL SELECT 'Chahat Agarwal', 4464, '27-Jan-1983', 'Paris', 22000, 3 FROM DUAL;

   5 rows created.

   SQL> SELECT * FROM Employee;

NAME	SSN_NUM	BIRTH_DAT	ADDRESS	SALARY	DEPT_NUM
Dhruv Garg	3349	02-JUL-88	Silicon Valley	15500	4
Aditya Chitlangia	3212	27-NOV-82	New York	20000	2
Raagul Nagendran	2948	16-MAY-80	London	8200	1
Aakash Tiwari	3206	06-AUG-75	Washington D.C.	21600	5
Chahat Agarwal	4464	27-JAN-83	Paris	22000	3

   SQL> INSERT INTO DEPT (Department_name, Department_num)

     2 SELECT 'Development', 1 FROM DUAL

     3 UNION ALL SELECT 'HR Management', 2 FROM DUAL

     4 UNION ALL SELECT 'Production', 3 FROM DUAL

     5 UNION ALL SELECT 'Marketing', 4 FROM DUAL

     6 UNION ALL SELECT 'Finance', 5 FROM DUAL;

   5 rows created.

   SQL> SELECT * FROM DEPT;

DEPARTMENT_NAME	DEPARTMENT_NUM
Development	1
HR Management	2
Production	3
Marketing	4
Finance	5

2. **Alter Table department add column DepartmentPhoneNum of integer data type and insert values into this column only.**

SQL> ALTER TABLE Department ADD(DepartmentPhoneNum number(8,0));

Table altered.

SQL> DESCRIBE Department;

Name	Null?	Type
DEPARTMENT_NAME		VARCHAR2(20)
DEPARTMENT_NUM		NUMBER
DEPARTMENTPHONENUM		NUMBER(8)

SQL> INSERT INTO Department (DepartmentPhoneNum)

  2 SELECT 93428 FROM DUAL

  3 UNION ALL SELECT 7583 FROM DUAL

  4 UNION ALL SELECT 12345678 FROM DUAL

  5 UNION ALL SELECT 584384 FROM DUAL

  6 UNION ALL SELECT 134245 FROM DUAL;

5 rows created.

3. **Alter table orders modify the size of DepartmentPhoneNum.**

SQL> ALTER TABLE Department MODIFY(DepartmentPhoneNum number(10,0));

Table altered.

4. **Modify the field name DepartmentPhoneNum of departments table to PhNo.**

SQL> ALTER TABLE Department RENAME COLUMN DepartmentPhoneNum to PhNo;

Table altered.

SQL> DESCRIBE Department;

Name	Null?	Type
DEPARTMENT_NAME		VARCHAR2(20)
DEPARTMENT_NUM		NUMBER
PHNO		NUMBER(10)

5. **Rename Table Department as DEPT.**

SQL> ALTER TABLE Department RENAME TO DEPT;

Table altered.

6. **Alter Table department remove column DepartmentPhoneNum.**

   SQL> ALTER TABLE DEPT DROP(PhNo);

   Table altered.

   SQL> SELECT * FROM DEPT;

   DEPARTMENT_NAME   DEPARTMENT_NUM

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7. **Truncate the department table.**

   SQL> TRUNCATE TABLE DEPT;

   Table truncated.

   SQL> SELECT * FROM DEPT;

   no rows selected

8. **Drop the department table.**

   SQL> DROP TABLE DEPT;

   Table dropped.

9. **Display all the employees and the departments they are working in.**

   SQL> SELECT e.Name, e.Department_num, d.Department_name

    2 FROM DEPT d, Employee e

    3 WHERE e.Department_num = d.Department_num;

NAME	DEPARTMENT_NUM	DEPARTMENT_NAME
Dhruv Garg	4	Marketing
Aditya Chitlangia	2	HR Management
Raagul Nagendran	1	Development
Aakash Tiwari	5	Finance
Chahat Agarwal	3	Production