# Lab # 03

# Introduction to Data Manipulation Language with Insert , Update and Delete Command

**DATA MANIPULATION LANGUAGE (DML):** The Data Manipulation Language (DML) is use to retrieve, insert and modify database information. These commands will be used by all database users during the routine operation of the database. Let's take a brief look at the basic

DML commands:

- **INSERT 2. UPDATE 3. DELETE**

- **INSERT** Only one row is inserted at a line with this command, optionally list the columns inthe insert clauses. List values in the default order of the columns in the table.

Encloses character and date values with in single quotation marks.

**SYNTAX:** Insert into table [(column [, column....])] Values (value [, value...])]

**Examples** Insert into dept(deptno, dname,loc) values (50, 'production', 'san francisco');

Insert into emp (empno, ename, job, sal, comm, deptno) values (7890,'jinks','clerk',1.2e3, null ,40);

- **UPDATE** Using update command, we can modify each row in the table

**SYNTAX:** Update table Set column= value [,

column=value] [Where condition]);If we don't use the

where condition, all the rows in the table will be updated.

**Examples** Update emp set comm = null where job = 'CLERK';

Update emp set job = 'manager', sal = sal +1000, deptno = 20 where ename='JONES';

- **DELETE** Removes existing rows by using the delete command.

**SYNTAX**: Delete [from] table [Where condition];

If the WHERE condition is omitted, all rows in the table will be deleted.

If you will try to delete a row that contains a primary key used as a foreign key in another table, you will experience an integrity constraint error.

**Examples** Delete from emp where Job = 'SALESMAN';

# TASK 1:

- Insert new employee's records.
- Insert new department records deptno=50, dname=ADVERTISING and loc=MIAMI.
- Delete the records of Sales department
- Change the employees sal for Smith
- Confirm all these changes by using Select statement
- Update the salary of each employee to 5000.
- Change the salary to $1,000 for all employees with a salary less than $900.
- Change the commission of department 20 to 1000.
- Change the hire date of all clerks to 02-04-2000
- Delete all the records having hire date before 21-dec-81
- Delete all records where salary is greater than 2000.

# TASK2:

- Use insert, update & delete commands in 10 different scenarios.