

## EXERCISE-2 MANIPULATING DATA

### **OBJECTIVE**

After, the completion of this exercise the students will be able to do the following

- Describe each DML statement
- Insert rows into tables
- Update rows into table
- Delete rows from table
- Control Transactions

A DML statement is executed when you:

- Add new rows to a table
- Modify existing rows
- Removing existing rows

A transaction consists of a collection of DML statements that form a logical unit of work.

### **To Add a New Row**

**INSERT Statement**

#### **Syntax**

**INSERT INTO table\_name VALUES (column1 values, column2 values, ..., columnn values);**

#### **Example:**

**INSERT INTO department (70, 'Public relations', 100,1700);**

#### **Inserting rows with null values**

**Implicit Method:** (Omit the column)

**INSERT INTO department VALUES (30,'purchasing');**

**Explicit Method:** (Specify NULL keyword)

**INSERT INTO department VALUES (100,'finance', NULL, NULL);**

#### **Inserting Special Values**

#### **Example:**

**Using SYSDATE**

**INSERT INTO employees VALUES (113,'louis', 'popp', 'lpopp','5151244567',SYSDATE, 'ac\_account', 6900, NULL, 205, 100);**

#### **Inserting Specific Date Values**

#### **Example:**

**INSERT INTO employees VALUES ( 114,'den', 'raphealy', 'drapheal', '5151274561', TO\_DATE('feb 3,1999','mon, dd ,yyyy'), 'ac\_account', 11000,100,30);**

### **To Insert Multiple Rows**

& is the placeholder for the variable value

#### **Example:**

**INSERT INTO department VALUES (&dept\_id, &dept\_name, &location);**

#### **Copying Rows from another table**

**FROM employees  
WHERE job\_id LIKE '%REP');**  
**CHANGING DATA IN A TABLE**

**UPDATE Statement**

**Syntax1:** ( to update specific rows)

**UPDATE table\_name SET column=value WHERE condition;**



UPDATE table\_name SET column=value;

### Updating columns with a subquery

```
UPDATE employees  
SET job_id= (SELECT job_id  
FROM employees  
WHERE employee_id=205)  
WHERE employee_id=114;
```

### REMOVING A ROW FROM A TABLE

#### DELETE STATEMENT

##### Syntax

DELETE FROM table\_name WHERE conditions;

##### Example:

```
DELETE FROM department WHERE dept_name='finance';
```

### Find the Solution for the following:

1. Create MY\_EMPLOYEE table with the following structure

NAME	NULL?	TYPE
ID	Not null	Number(4)
Last_name		Varchar(25)
First_name		Varchar(25)
Userid		Varchar(25)
Salary		Number(9,2)

2. Add the first and second rows data to MY\_EMPLOYEE table from the following sample data.

ID	Last_name	First_name	Userid	salary
1	Patel	Ralph	rpatel	895
2	Dancs	Betty	bdancs	860
3	Biri	Ben	bbiri	1100
4	Newman	Chad	Cnewman	750
5	Ropebur	Audrey	aropebur	1550

3. Display the table with values.

4. Populate the next two rows of data from the sample data. Concatenate the first letter of the first\_name with the first seven characters of the last\_name to produce Userid.



5. Make the data additions permanent.

Userid	Varchar(25)
Salary	Number(9,2)

2. Add the first and second rows data to MY\_EMPLOYEE table from the following sample data.

ID	Last_name	First_name	Userid	salary
1	Patel	Ralph	rpatel	895
2	Dancs	Betty	bdancs	860
3	Biri	Ben	bbiri	1100
4	Newman	Chad	Cnewman	750
5	Ropebur	Audrey	arophebur	1550

3. Display the table with values.

15 / 2 3

4. Populate the next two rows of data from the sample data. Concatenate the first letter of the first\_name with the first seven characters of the last\_name to produce Userid.

5. Make the data additions permanent.

6. Change the last name of employee 3 to Drexler.

7. Change the salary to 1000 for all the employees with a salary less than 900.

8. Delete Betty dancs from MY\_EMPLOYEE table.

9. Empty the fourth row of the emp table.

Evaluation Procedure	Marks awarded
Query(5)	
Execution (5)	
Viva(5)	
Total (15)	
Faculty Signature	