

## 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

➤ Using Subquery

Example:

```
INSER INTO sales_reps(id, name, salary, commission_pct)  
SELECT employee_id, Last_name, salary, commission_pct  
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;
```

Syntax 2: (To updae all rows)

```
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	aropibur	1550

3. Display the table with values.

```
select * from my_employee
```

ID	first_name	last_name	user_id	salary
1	Patel	Ralph	rpatel	895
2	Dancs	Betty	bdancs	860
3	Biri	Ben	bbiri	1100
4	Newman	Chad	Cnewman	750
5	Ropebur	Audrey	aropibur	1550

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.

```
BEGIN TRANSACTION
INSERT INTO MY_EMPLOYEE VALUES (3, 'Biri', 'Ben', 'bbiri', 1100);
COMMIT;
```

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

```
Update MY_EMPLOYEE Set last_name = 'Drexler' Where ID = 3
```

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

update MY\_EMPLOYEE set salary = 1000 where salary < 900;

8. Delete Betty dances from MY\_EMPLOYEE table.

delete from MY\_EMPLOYEE where first\_name = "dances";

9. Empty the fourth row of the emp table.

Empty from MY\_EMPLOYEE

Evaluation Procedure	Marks awarded
Query(5)	
Execution (5)	
Viva(5)	
Total (15)	
Faculty Signature	<i>BPL</i>