EXERCISE-2

MANIPULATING DATA

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.

SELECT * FROM MY_EMPLOYEE;

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.

INSERT INTO MY_EMPLOYEE (ID, Last_name, First_name, Userid, Salary)

VALUES

(3, 'Biri', 'Ben', CONCAT(LEFT('Ben', 1), LEFT('Biri', 7)), 1100),

(4, 'Newman', 'Chad', CONCAT(LEFT('Chad', 1), LEFT('Newman', 7)), 750);

Confirm the data insertion

SELECT * FROM MY_EMPLOYEE;

5. Make the data additions permanent.

COMMIT;

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

INSERT INTO MY_EMPLOYEE (ID, Last_name, First_name, Userid, Salary)

VALUES

(3, 'Biri', 'Ben', CONCAT(LEFT('Ben', 1), LEFT('Biri', 7)), 1100),

(4, 'Newman', 'Chad', CONCAT(LEFT('Chad', 1), LEFT('Newman', 7)), 750);

Confirm the data insertion

SELECT * FROM MY_EMPLOYEE;

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 dancs from MY _EMPLOYEE table.

DELETE FROM MY_EMPLOYEE

WHERE Last_name = 'Dancs' AND First_name = 'Betty';

PRACTICE QUESTIONS

Working with Columns, Characters, and Rows

1. The manager of Global Fast Foods would like to send out coupons for the upcoming sale. He wants to send one coupon to each household. Create the SELECT statement that returns the customer last name and a mailing address.

```
SELECT last_name, address FROM customers;
```

2. Each statement below has errors. Correct the errors and execute the query in Oracle Application Express.

a. SELECT first name FROM f_staffs;

```
SELECT first_name FROM f_staffs;
```

b. SELECT first_name |" " | last_name AS "DJs on Demand Clients" FROM d_clients;

```
SELECT CONCAT(first_name, ' ', last_name) AS "DJs on Demand Clients"
FROM d_clients;
```

c. SELECT DISCTINCT f_order_lines FROM quantity;

```
SELECT DISTINCT quantity FROM f_order_lines;
```

d. SELECT order number FROM f_orders;

```
SELECT order_number FROM f_orders;
```

3. Sue, Bob, and Monique were the employees of the month. Using the f_staffs table, create a SELECT statement to display the results as shown in the Super Star chart.

Super Star
*** Sue *** Sue ***
*** Bob *** Bob ***
*** Monique *** Monique ***

```
SELECT CONCAT('*** ', first_name, ' *** ', first_name, ' ***') AS "Super Star" FROM
f_staffs
WHERE first_name IN ('Sue', 'Bob', 'Monique');
```

4.Which of the following is TRUE about the following query?

SELECT first_name, DISTINCT birthdate
FROM f_staffs;
a. Only two rows will be returned.
b. Four rows will be returned.
c. Only Fred 05-Jan-1988 and Lizzie 10-Nov-1987 will be returned.
d. No rows will be returned.

b. Four rows will be returned.

5. Global Fast Foods has decided to give all staff members a 5% raise. Prepare a report that presents the output as shown in the chart.

EMPLOYEE LAST NAME	CURRENT SALARY	SALARY WITH 5% RAISE

```
SELECT last_name AS "EMPLOYEE LAST NAME", salary AS "CURRENT SALARY",
salary * 1.05 AS
"SALARY WITH 5% RAISE"FROM f_staffs;
```

6. Create a query that will return the structure of the Oracle database EMPLOYEES table. Which columns are marked “nullable”? What does this mean?

```
SHOW COLUMNS FROM EMPLOYEES;
```

7. The owners of DJs on Demand would like a report of all items in their D_CDs table with the following column headings: Inventory Item, CD Title, Music Producer, and Year Purchased. Prepare this report.
8.True/False – The following SELECT statement executes successfully:
SELECT last_name, job_id, salary AS Sal FROM employees;

```
SELECT inventory_item AS "Inventory Item",
    cd_title AS "CD Title",
    music_producer AS "Music Producer",
    year_purchased AS "Year Purchased"
FROM d_cds;
```

8.True/False – The following SELECT statement executes successfully:
SELECT
last_name, job_id, salary AS Sal FROM employees;

True

9.True/False – The following SELECT statement executes successfully:
SELECT * FROM job_grades;

True

10.There are four coding errors in this statement. Can you identify them?

SELECT employee_id, last_name sal x 12 ANNUAL SALARY FROM employees;
SELECT employee_id,last_name, salary * 12 AS "ANNUAL SALARY"
FROM employees;

11.In the arithmetic expression salary*12 - 400, which operation will be evaluated first?

Multiplication will be evaluated first.

12. Which of the following can be used in the SELECT statement to return all columns of data in the Global Fast Foods f_staffs table?
a. column names
b. *
c. DISTINCT id
d. both a and b

b. *

13. Using SQL to choose the columns in a table uses which capability?
a. selection
b. projection
c. partitioning
d. join

b. projection

14. SELECT last_name AS "Employee". The column heading in the query result will appear as: a. EMPLOYEE
b. employee
c. Employee
d. "Employee:

c. Employee

15. Which expression below will produce the largest value?
a. SELECT salary*6 + 100
b. SELECT salary* (6 + 100)
c. SELECT 6(salary+ 100)
d. SELECT salary+6*100

b. SELECT salary * (6 + 100)

16. Which statement below will return a list of employees in the following format? Mr./Ms. Steven King is an employee of our company.
a. SELECT "Mr./Ms."||first_name||' '||last_name 'is an employee of our company.' AS "Employees" FROM employees;
b. SELECT 'Mr./Ms. 'first_name,last_name ||' '||'is an employee of our company.' FROM employees;
c. SELECT 'Mr./Ms. '||first_name||' '||last_name ||' '||'is an employee of our company.' AS "Employees" FROM employees ;
d. SELECT Mr./Ms. ||first_name||' '||last_name ||' '||"is an employee of our company." AS "Employees" FROM employees

SELECT CONCAT('Mr./Ms. ', first_name, ' ', last_name, ' is an employee of our company.') AS "Employees"
FROM employees;

17. Which is true about SQL statements?
a. SQL statements are case-sensitive
b. SQL clauses should not be written on separate lines.
c. Keywords cannot be abbreviated or split across lines.
d. SQL keywords are typically entered in lowercase; all other words in uppercase.

c. Keywords cannot be abbreviated or split across lines.

18. Which queries will return three columns each with UPPERCASE column headings? a. SELECT "Department_id", "Last_name", "First_name"
FROM employees;
b. SELECT DEPARTMENT_ID, LAST_NAME, FIRST_NAME
FROM employees;
c. SELECT department_id, last_name, first_name AS UPPER CASE
FROM employees
d. SELECT department_id, last_name, first_name
FROM employees;

b. SELECT DEPARTMENT_ID, LAST_NAME, FIRST_NAME FROM employees;

19. Which statement below will likely fail?

a. SELCT * FROM employees;
b. Select * FROM employees;
c. SELECT * FROM EMPLOYEES;
d. SelecT* FROM employees;

a. SELCT * FROM employees;