Ex. No: 8 Date: 27 – 10 - 2022

**Experiment 8**

Explicit Cursors

**Consider the following schema of a database:**

**customers** (ID, NAME, AGE, ADDRESS, SALARY)

**Table:**

**customers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | NAME | AGE | ADDRESS | SALARY |
| 1 | Ramesh | 32 | Ahmedabad | 2500.00 |
| 2 | Khilan | 25 | Delhi | 2000.00 |
| 3 | Kaushik | 23 | Kota | 2500.00 |
| 4 | Chaitali | 25 | Mumbai | 7000.00 |
| 5 | Hardik | 27 | Bhopal | 9000.00 |
| 6 | Komal | 22 | MP | 5000.00 |

**Write a SQL query to display customer’s ID, Name and Address using explicit cursors**

Query

DECLARE

c\_id customers.id%type;

c\_name customers.name%type;

c\_addr customers.address%type;

CURSOR c\_customers is

SELECT id, name, address FROM customers;

BEGIN

OPEN c\_customers;

LOOP

FETCH c\_customers into c\_id, c\_name, c\_addr;

EXIT WHEN c\_customers%notfound;

dbms\_output.put\_line(c\_id || ' ' || c\_name || ' ' || c\_addr);

END LOOP;

CLOSE c\_customers;

END;

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**Code:**

SQL> create table Customers (ID number(1), Name varchar2(20), Age number(2), Address varchar2(20), Salary float, primary key(ID));

Table created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 1

Enter value for name: Ramesh

Enter value for age: 32

Enter value for address: Ahmedabad

Enter value for salary: 2000

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(1,'Ramesh', 32,'Ahmedabad', 2000)

1 row created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 2

Enter value for name: Khilan

Enter value for age: 25

Enter value for address: Delhi

Enter value for salary: 1500

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(2,'Khilan', 25,'Delhi', 1500)

1 row created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 3

Enter value for name: Kaushik

Enter value for age: 23

Enter value for address: Kota

Enter value for salary: 2000

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(3,'Kaushik', 23,'Kota', 2000)

1 row created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 4

Enter value for name: Chaitali

Enter value for age: 25

Enter value for address: Mumbai

Enter value for salary:

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(4,'Chaitali', 25,'Mumbai', )

insert into Customers values(4,'Chaitali', 25,'Mumbai', )

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 4

Enter value for name: Chaitali

Enter value for age: 25

Enter value for address: Mumbai

Enter value for salary: 6500

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(4,'Chaitali', 25,'Mumbai', 6500)

1 row created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 5

Enter value for name: Hardik

Enter value for age: 27

Enter value for address: Bhopal

Enter value for salary: 8500

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(5,'Hardik', 27,'Bhopal', 8500)

1 row created.

SQL> insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary);

Enter value for id: 6

Enter value for name: Komal

Enter value for age: 22

Enter value for address: MP

Enter value for salary: 4500

old 1: insert into Customers values(&ID,'&Name', &Age,'&Address', &Salary)

new 1: insert into Customers values(6,'Komal', 22,'MP', 4500)

1 row created.

SQL> desc customers

Name Null? Type

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ID NOT NULL NUMBER(1)

NAME VARCHAR2(20)

AGE NUMBER(2)

ADDRESS VARCHAR2(20)

SALARY FLOAT(126)

SQL> select \* from customers;

ID NAME AGE ADDRESS SALARY

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1 Ramesh 32 Ahmedabad 3000

2 Khilan 25 Delhi 2500

3 Kaushik 23 Kota 3000

4 Chaitali 25 Mumbai 7500

5 Hardik 27 Bhopal 9500

6 Komal 22 MP 5500

6 rows selected.

SQL> set serveroutput on

SQL> DECLARE

2 c\_id customers.id%type;

3 c\_name customers.name%type;

4 c\_addr customers.address%type;

5 CURSOR c\_customers is

6 SELECT id, name, address FROM customers;

7 BEGIN

8 OPEN c\_customers;

9 LOOP

10 FETCH c\_customers into c\_id, c\_name, c\_addr;

11 EXIT WHEN c\_customers%notfound;

12 dbms\_output.put\_line(c\_id || ' ' || c\_name || ' ' || c\_addr);

13 END LOOP;

14 CLOSE c\_customers;

15 END;

16 /

1 Ramesh Ahmedabad

2 Khilan Delhi

3 Kaushik Kota

4 Chaitali Mumbai

5 Hardik Bhopal

6 Komal MP

PL/SQL procedure successfully completed.