

## 310242 : DATABASE MANAGEMENT SYSTEM

### 310247: Database Management System Lab

#### Group A - Assignment No. 6

**Title :** Write a PL/SQL block of code using Cursors: (All types: Implicit, Explicit, Cursor FOR Loop, Parameterized Cursor)

**Schema:**

1. *O\_RollCall* (ROLLNO, NAME, ATT\_DATE, ATTENDANCE)
2. *N\_RollCall* (ROLLNO, NAME, ATT\_DATE, ATTENDANCE)

Write a PL/SQL block of code using parameterized Cursor FOR-

- It will merge the data available in the newly created table N\_RollCall with the data available in the table O\_RollCall.
- If the data in the first table already exist in the second table then that data should be skipped

writing PL/SQL block to implement all types of Cursors inline with above statement.

**Tables :**

1. *N\_ROLLCALL* (ROLLNO, NAME, ATT\_DATE, ATTENDANCE)
2. *O\_ROLLCALL* (ROLLNO, NAME, ATT\_DATE, ATTENDANCE)

```
CREATE TABLE N_ROLLCALL(ROLLNO NUMBER PRIMARY KEY, NAME CHAR(12), ATT_DATE DATE, ATTENDANCE CHAR(12));
```

```
INSERT INTO N_ROLLCALL VALUES(1,'AAKASH','8-22-2017','PRESENT');
INSERT INTO N_ROLLCALL VALUES(2,'AMIT','8-21-2017','PRESENT');
INSERT INTO N_ROLLCALL VALUES(3,'ANIKET','8-20-2017','ABSENT');
INSERT INTO N_ROLLCALL VALUES(4,'AKSHAY','8-23-2017','PRESENT');
INSERT INTO N_ROLLCALL VALUES(5,'AANAND','8-24-2017','ABSENT');
INSERT INTO N_ROLLCALL VALUES(7,'ANURAG','8-25-2017','PRESENT');
```

```
set serveroutput on;
```

SELECT \* FROM N-ROLLCALL;

ROLLNO	NAME	ATT_DATE	ATTENDANCE
1	AAKASH	08/22/2017	PRESENT
2	AMIT	08/21/2017	PRESENT
3	ANIKET	08/20/2017	ABSENT
4	AKSHAY	08/23/2017	PRESENT
5	AANAND	08/24/2017	ABSENT
7	ANURAG	08/25/2017	PRESENT

6 rows returned in 0.00 seconds

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```
CREATE TABLE O_ROLLCALL(ROLLNO NUMBER PRIMARY KEY, NAME CHAR(12),ATT_DATE
DATE,ATTENDANCE CHAR(12));
```

---

```
INSERT INTO O_ROLLCALL VALUES(1,'AAKASH','8-22-2017','PRESENT');
INSERT INTO O_ROLLCALL VALUES(3,' ANIKET ','8-21-2017','PRESENT');
INSERT INTO O_ROLLCALL VALUES(7,' ANURAG ','8-20-2017','ABSENT');
INSERT INTO O_ROLLCALL VALUES(8,'RAHUL','8-23-2017','PRESENT');
INSERT INTO O_ROLLCALL VALUES(9,'ANKITA','8-24-2017','ABSENT');
```

---

SELECT \* FROM O\_ROLLCALL;

ROLLNO	NAME	ATT_DATE	ATTENDANCE
1	AAKASH	08/22/2017	PRESENT
3	ANIKET	08/21/2017	PRESENT
7	ANURAG	08/20/2017	ABSENT
8	RAHUL	08/23/2017	PRESENT
9	ANKITA	08/24/2017	ABSENT

5 rows returned in 0.00 seconds

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SELECT \* FROM N-ROLLCALL;

ROLLNO	NAME	ATT_DATE	ATTENDANCE
1	AAKASH	08/22/2017	PRESENT
2	AMIT	08/21/2017	PRESENT
3	ANIKET	08/20/2017	ABSENT
4	AKSHAY	08/23/2017	PRESENT
5	AANAND	08/24/2017	ABSENT
7	ANURAG	08/25/2017	PRESENT

6 rows returned in 0.00 seconds [Download](#)

```
SET SERVEROUTPUT ON;
BEGIN
UPDATE N_ROLLCALL SET ATTENDANCE='ABSENT' WHERE NAME='AAKASH';
IF SQL%FOUND THEN
dbms_output.put_line('Updated - If Found');
END IF;
IF SQL%NOTFOUND THEN
dbms_output.put_line('NOT Updated - If NOT Found');
END IF;
IF SQL%ROWCOUNT>0 THEN
dbms_output.put_line(SQL%ROWCOUNT||' Rows Updated');
ELSE
dbms_output.put_line('NO Rows Updated Found');
END IF;
END;
/
```

---

OUTPUT: Updated - If Found  
1 Rows Updated

Statement processed.

SELECT \* FROM N-ROLLCALL;

---

ROLLNO	NAME	ATT_DATE	ATTENDANCE
1	AAKASH	08/22/2017	ABSENT
2	AMIT	08/21/2017	PRESENT
3	ANIKET	08/20/2017	ABSENT
4	AKSHAY	08/23/2017	PRESENT
5	AANAND	08/24/2017	ABSENT
7	ANURAG	08/25/2017	PRESENT

6 rows returned in 0.00 seconds [Download](#)

```
DECLARE
CURSOR EXPLICIT_CUR IS select ROLLNO,NAME,ATT_DATE from N_ROLLCALL where
ATTENDANCE='ABSENT';
tmp EXPLICIT_CUR %rowtype;
BEGIN
OPEN EXPLICIT_CUR;
Loop exit when EXPLICIT_CUR%NOTFOUND;
FETCH EXPLICIT_CUR into tmp;
dbms_output.put_line('ROLL NO : ' || tmp.ROLLNO||' NAME : '||tmp.NAME||'DATE
: ' || tmp.ATT_DATE);
END Loop;
IF EXPLICIT_CUR%ROWCOUNT>0 THEN
dbms_output.put_line(SQL%ROWCOUNT ||' ROWS FOUND');
ELSE
dbms_output.put_line('NO ROWS FOUND');
END IF;
CLOSE EXPLICIT_CUR;
END;
/
```

---

#### OUTPUT:

```
ROLL NO : 1 NAME : AAKASH      DATE : 08/22/2017
ROLL NO : 3 NAME : ANIKET     DATE : 08/20/2017
ROLL NO : 5 NAME : AANAND     DATE : 08/24/2017
ROLL NO : 5 NAME : AANAND     DATE : 08/24/2017
  ROWS FOUND
```

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## 310242 : DATABASE MANAGEMENT SYSTEM

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```
SET SERVEROUTPUT ON;
DECLARE
cursor FOR_CUR is select ROLLNO,NAME,ATT_DATE from N_ROLLCALL where
ATTENDANCE='ABSENT';
tmp FOR_CUR %rowtype;
BEGIN
FOR tmp IN FOR_CUR
LOOP
dbms_output.put_line('ROLL NO :' || tmp.ROLLNO || ' ' 'NAME : ' || tmp.NAME || ' '
'DATE :' || tmp.ATT_DATE);
END Loop;
END;
```

---

### OUTPUT:

ROLL NO :1	NAME : AAKASH	DATE :08/22/2017
ROLL NO :3	NAME : ANIKET	DATE :08/20/2017
ROLL NO :5	NAME : AANAND	DATE :08/24/2017

Statement processed.

---

**PROBLEM STATEMENT:- MERGE THE DATA AVAILABLE IN THE NEWLY CREATED TABLE N\_ROLLCALL WITH THE DATA AVAILABLE IN THE TABLE O\_ROLLCALL**

BEGIN

MERGE INTO N\_ROLLCALL T1 USING (SELECT ROLLNO, NAME, ATT\_DATE,  
ATTENDANCE FROM O\_ROLLCALL)T2 ON (T1.ROLLNO = T2.ROLLNO) WHEN NOT  
MATCHED THEN INSERT VALUES  
(T2.ROLLNO,T2.NAME,T2.ATT\_DATE,T2.ATTENDANCE);

IF SQL%FOUND THEN  
dbms\_output.put\_line('MERGED');  
END IF;  
IF SQL%NOTFOUND THEN  
dbms\_output.put\_line('NOT MERGED');  
END IF;  
IF SQL%ROWCOUNT>0 THEN  
dbms\_output.put\_line(SQL%ROWCOUNT||' Rows Updated');  
ELSE  
dbms\_output.put\_line('NO Rows Updated Found');  
END IF;  
END;  
/

---

MERGED

2 Rows Updated

1 row(s) inserted.

---

SELECT \* FROM N\_ROLLCALL;

ROLLNO	NAME	ATT_DATE	ATTENDANCE
8	RAHUL	08/23/2017	PRESENT
9	ANKITA	08/24/2017	ABSENT
1	AAKASH	08/22/2017	ABSENT
2	AMIT	08/21/2017	PRESENT
3	ANIKET	08/20/2017	ABSENT
4	AKSHAY	08/23/2017	PRESENT
5	AANAND	08/24/2017	ABSENT
7	ANURAG	08/25/2017	PRESENT

8 rows returned in 0.00 seconds

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SELECT \* FROM O\_ROLLCALL;

ROLLNO	NAME	ATT_DATE	ATTENDANCE
1	AAKASH	08/22/2017	PRESENT
3	ANIKET	08/21/2017	PRESENT
7	ANURAG	08/20/2017	ABSENT
8	RAHUL	08/23/2017	PRESENT
9	ANKITA	08/24/2017	ABSENT

5 rows returned in 0.01 seconds

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## 5. PARAMETEREZIED CURSOR

DECLARE

CURSOR PARAM\_CURSOR (ROLL NUMBER) IS SELECT \* FROM N\_ROLLCALL  
WHERE ROLLNO = ROLL;

TMP PARAM\_CURSOR %ROWTYPE;

BEGIN

FOR TMP IN PARAM\_CURSOR (1) LOOP  
dbms\_output.put\_line('NAME '||TMP.NAME);  
dbms\_output.put\_line('DATE '||TMP.ATT\_DATE);  
dbms\_output.put\_line('ATTENDANCE: '||TMP.ATTENDANCE);  
END Loop;

END;

/

---

OUTPUT:

NAME AAKASH  
DATE 08/22/2017  
ATTENDANCE: ABSENT

Statement processed.

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