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## **DBMS LAB 9 - PL/SQL CONDITIONAL AND OPERATIVE STATEMENTS**

### **AIM :**

To build a PL SQL Program for updating the salary in emp table using some conditions.

### **THEORY:**

#### **Features of PL/SQL :**

PL/SQL has the following features –

- PL/SQL is tightly integrated with SQL.
- It offers extensive error checking.
- It offers numerous data types.
- It offers a variety of programming structures.
- It supports structured programming through functions and procedures.
- It supports object-oriented programming.
- It supports the development of web applications and server pages.

#### **Advantages of PL/SQL**

PL/SQL has the following advantages –

- SQL is the standard database language and PL/SQL is strongly integrated with SQL. PL/SQL supports both static and dynamic SQL. Static SQL supports DML operations and transaction control from PL/SQL blocks. In Dynamic SQL, SQL allows embedding DDL statements in PL/SQL blocks.
- PL/SQL allows sending an entire block of statements to the database at one time. This reduces network traffic and provides high performance for the applications.
- PL/SQL gives high productivity to programmers as it can query, transform, and update data in a database.
- PL/SQL saves time on design and debugging by strong features, such as exception handling, encapsulation, data hiding, and object-oriented data types.
- Applications written in PL/SQL are fully portable.
- PL/SQL provides a high security level.
- PL/SQL provides access to predefined SQL packages.
- PL/SQL provides support for Object-Oriented Programming.
- PL/SQL provides support for developing Web Applications and Server Pages.

## **ALGORITHM:**

1.Create a table emp with attributes as

- Eid
- Name
- Dept
- salary

2.Insert into emp values() and make a table

3.Insert upto 3 rows

4.ed

5.in the notepad file write the program according to the select and print total number of rows with name='Jayesh'.

6.

1. declare

```

2. total_rows numbers(2)
3. Begin
4. Update emp set salary = salary+100 where name='Jayesh';
5. IF sql%notfound THEN
6. dbms_output.put_line('No Employee selected');
7. ELSIF sql%found THEN
8. total_rows:=sql%rowcount;
9. dbms_output.put_line(total_rows || 'Employee selected');
10. END IF;
11. END;
7./
8.SELECT * from emp

1.For the next program display employee number employee name and
employee salary for all the employees in a loop
2.
1. declare
2. Emp_no emp.eid%type;
3. Emp_name emp.name%type;
4. Emp_sal emp.salary%type;
5. CURSOR emp_cur is SELECT eid,name,salary from employee
6. Begin
7. Open emp_curr;
8. dbms_output.put_line('emp_no' || 'Employee selected');
9. END LOOP;
10. CLOSE emp_cur;
11. END;
12. /

```

## SOURCE CODE:

1)declare

```
total_rows numbers(2)
Begin
Update emp set salary = salary+100 where name='Jayesh';
IF sql%notfound THEN
dbms_output.put_line('No Employee selected');
ELSIF sql%found THEN
total_rows:=sql%rowcount;
dbms_output.put_line(total_rows || 'Employee selected');
END IF;
END;
```

```
2)  declare
    Emp_no emp.eid%type;
    Emp_name emp.name%type;
    Emp_sal emp.salary%type;
    CURSOR emp_cur is SELECT eid,name,salary from employee
Begin
    Open emp_curr;
    dbms_output.put_line('emp_no' || 'Employee selected');
    END LOOP;
    CLOSE emp_cur;
    END;
```

**SCREENSHOTS:**

```
C:\Users\cseadmin\Downloads\instantclient_11_2-20220315T030517Z-001\instantclient_11_2\sqlplus.exe

SQL>
SQL> CREATE TABLE EMP(EID NUMBER(10),NAME VARCHAR2(20),DEPT VARCHAR2(10),SALARY NUMBER(10));
CREATE TABLE EMP(EID NUMBER(10),NAME VARCHAR2(20),DEPT VARCHAR2(10),SALARY NUMBER(10))
*
ERROR at line 1:
ORA-00955: name is already used by an existing object

SQL> SELECT * FROM emp
2 /

no rows selected

SQL> desc emp
          Name                          Null?    Type
-----
EID                                NUMBER(10)
NAME                               VARCHAR2(10)
SALARY                             NUMBER(10)
DEPT                                VARCHAR2(20)

SQL> insert into emp values(7468,'Jayesh',74000,'clerk');
1 row created.

SQL> insert into emp values(7889,'awsh',74445,'clerk');
1 row created.

SQL> insert into emp values(79000,'anshw',75745,'clerk');
1 row created.

SQL> ed
Wrote file afiedt.buf

1 declare
2 total_rows number(2)
3 begin
4 update emp set salary = salary+100 where name='Jayesh';
5 IF sql%notfound THEN
6 dbms_output.put_line('No Employee selected');
7 ELSEIF sql%found THEN
```

```
C:\Users\cseadmin\Downloads\instantclient_11_2-20220315T030517Z-001\instantclient_11_2\sqlplus.exe

SQL> /
begin
*
ERROR at line 3:
ORA-00650: line 3, column 1:
PLS-00103: Encountered the symbol "BEGIN" when expecting one of the following:
:= ; not null default character
The symbol ";" was substituted for "BEGIN" to continue.

SQL> ed
Wrote file afiedt.buf

1 declare
2 total_rows number(2);
3 begin
4 update emp set salary = salary+100 where name='Jayesh';
5 IF sql%notfound THEN
6 dbms_output.put_line('No Employee selected');
7 ELSEIF sql%found THEN
8 total_rows:=sql%rowcount;
9 dbms_output.put_line(total_rows || 'Employee selected');
10 END IF;
11* END;
SQL> /

PL/SQL procedure successfully completed.

SQL> SELECT * FROM emp
2 /

EID NAME          SALARY DEPT
-----
7468 Jayesh       74100 clerk
7889 awsh         74445 clerk
79000 anshw       75745 clerk

SQL> ed
Wrote file afiedt.buf

1 declare
2 emp_no emp.eid%type;
3 emp_name emp.name%type;
4 emp_sal emp.salary%type;
```

```
C:\Users\cseadmin\Downloads\instantclient_11_2-20220315T030517Z-001\instantclient_11_2\sqlplus.exe
SQL> ed
Write file afiedt.buf

 1 declare
 2 emp_no emp.eid%type;
 3 emp_name emp.name%type;
 4 emp_sal emp.salary%type;
 5 CURSOR emp_cur is SELECT eid,name,salary from emp;
 6 begin
 7 OPEN emp_cur;
 8 dbms_output.put_line('emp_no' || ' ' || 'emp_name' || ' ' || 'emp_sal');
 9 LOOP
10 FETCH emp_cur into emp_no,emp_name,emp_sal;
11 EXIT WHEN emp_cur%notfound;
12 dbms_output.put_line(emp_no || ' ' || emp_name || ' ' || emp_sal);
13 END LOOP;
14 CLOSE emp_cur;
15* END;
SQL> /

PL/SQL procedure successfully completed.

SQL> set serveroutput on
SQL> /
emp_noemp_nameemp_sal
7468Jayesh74100
7889awsh74445
79000anshw75745

PL/SQL procedure successfully completed.

SQL>
```

## RESULT:

Thus we have successfully built a PL SQL procedure which can make changes in the emp table based on some conditions.