

**Course :** CSE 2004 – Database Management Systems

**Lab slot :** L55+ L56

**Faculty :** Dr. B Saleena

**Ex. No: 10**

**Date: 28/10/17**

**PL/SQL Practice**

**QUESTION 1**

Consider the below schema: student(stud\_no: Integer, machine\_no: integer, number\_of\_hours: string)

Write a PL/SQL Procedure to update the 'number of hours' as 10 for student number 1174.

**Table : Student with 10 records**

```
SQL> CREATE TABLE Student(Stud_no number, Machine_no number, Num_of_hrs varchar(10), CONSTRAINT studno_pk PRIMARY KEY(Stud_no));
```

Table created.

```
SQL> SELECT * FROM Student;
```

STUD_NO	MACHINE_NO	NUM_OF_HRS
-----	-----	-----
1190	2	18
1127	1	14
1199	4	12
1143	3	15
1126	8	18
1091	5	8
1111	7	14
1113	6	11
1174	9	6
1382	10	13

10 rows selected.

PL/SQL PROCEDURE :

```
SQL> set serveroutput on;
```

```
SQL> DECLARE
```

```
2 var_studno Student.Stud_no%TYPE;
```

```
3 var_machine Student.Machine_no%TYPE;
```

```
4 var_noofhrs Student.Num_of_hrs%TYPE;
```

```
5 CURSOR s_studentDetails IS
```

```
6 SELECT Stud_no, Machine_no, Num_of_hrs FROM Student;
```

```
7 BEGIN
```

```
8 UPDATE Student SET Num_of_hrs = '10' WHERE Stud_no = 1174;
```

```
9 OPEN s_studentDetails;
```

```
10 dbms_output.put_line(' Student_num Machine_num Num_of_hrs ');
```

```
11 LOOP
```

```
12 FETCH s_studentDetails INTO var_studno, var_machine, var_noofhrs;
```

```
13 EXIT WHEN s_studentDetails%notfound;
```

```
14 dbms_output.put_line(' || var_studno || ' ' || var_machine || ' ' || var_noofhrs);
```

```
15 dbms_output.put_line(' ');
```

```
16 END LOOP;
```

```
17 CLOSE s_studentDetails;
```

```
18 END;
```

```
19 /
```

```
Student_num Machine_num Num_of_hrs
```

```
1190          2          18
```

```
1127          1          14
```

```
1199          4          12
```

```
1143          3          15
```

```
1126          8          18
```

```
1091          5           8
```

```
1111          7          14
```

```
1113          6          11
```

```
1174          9          10
```

```
1382         10          13
```

PL/SQL procedure successfully completed.

**QUESTION 2**

Consider the below schema: Employee (emp\_no: Integer, emp\_name: string, salary: number)

Write a PL/SQL function which displays the number of employees whose who gets salary less than 5000.

**Table : Employee with 10 records**

```
SQL> CREATE TABLE Employee(Emp_ID number, Emp_name varchar(30), Salary number, CONSTRAINT empid_pk
PRIMARY KEY(Emp_ID));
```

Table created.

```
SQL> SELECT * FROM Employee;
```

EMP_ID	EMP_NAME	SALARY
-----	-----	-----
1190	Dhruv Garg	10500
3212	Aditya Chitlangia	15000
2948	Raagul Nagendran	3200
3206	Aakash Tiwari	16600
4464	Chahat Agarwal	3200
3285	Vishnu Nagpal	13200
2616	Rachit Tiwari	11900
2781	Shantanu Gupta	2800
1427	Swaraj Phadtare	11000
1426	Aravind Krisnan	8600

10 rows selected.

PL SQL PROCEDURE

```
SQL> set serveroutput on;
```

```
SQL> DECLARE
```

```
2 var_empid Employee.Emp_ID%TYPE;
```

```
3 var_empname Employee.Emp_name%TYPE;
```

```
4 var_empsal Employee.Salary%TYPE;
```

```
5 BEGIN
```

```
6 dbms_output.put_line(' Emp ID Emp name Salary ');
```

```
7 FOR loop_emp IN
```

```
8 (SELECT Emp_ID || ' ' || Emp_name || ' ' || Salary details
```

```
9 FROM Employee
```

```
10 WHERE Salary < 5000)
```

```
11 LOOP
```

```
12 dbms_output.put_line(loop_emp.details);
```

```
13 END LOOP loop_emp;
```

```
14 END;
```

```
15 /
```

Emp ID	Emp name	Salary
2948	Raagul Nagendran	3200
4464	Chahat Agarwal	3200
2781	Shantanu Gupta	2800

PL/SQL procedure successfully completed.

**QUESTION 3**

Consider the below schema : Customer\_address (cust\_name, cust\_street, cust\_city)

Write a PL/SQL implicit cursor to display the details of all the customers who does not resides in Chennai.

**Table : Customer Address with 10 records**

```
SQL> CREATE TABLE Customer_Address(Customer_name varchar(30), Customer_street varchar(30), Customer_city
varchar(30), CONSTRAINT custname_pk PRIMARY KEY(Customer_name));
```

Table created.

```
SQL> SELECT * FROM Customer_Address;
```

CUSTOMER_NAME	CUSTOMER_STREET	CUSTOMER_CITY
-----	-----	-----
Dhruv Garg	Marine Drive	Mumbai
Chahat Agarwal	Egmore	Chennai
Aakash Tiwary	HiTech City	Hyderabad
Raagul Nagendran	Singanallur	Coimbatore
Aravind Krishnan	Anna Nagar	Chennai
Aditya Chitlangia	Adyar	Chennai
Vishnu Nagpal	Connaught Place	Delhi
Arush Sharma	Race course	Dehradun
Abhinav Sharma	Sushant Lok	Gurgaon
Rachit Tiwari	Malleshwaram	Bengaluru

10 rows selected.

PL SQL Procedure

SQL> set serveroutput on;

SQL> DECLARE

```

2 var_custname Customer_Address.Customer_name%TYPE;
3 var_custstreet Customer_Address.Customer_street%TYPE;
4 var_custcity Customer_Address.Customer_city%TYPE;
5 BEGIN
6 dbms_output.put_line(' Customer name  Street  City ');
7 FOR loop_cust IN
8 (SELECT Customer_name || ' ' || Customer_street || ' ' || Customer_city details
9 FROM Customer_Address
10 WHERE Customer_city != 'Chennai')
11 LOOP
12 dbms_output.put_line(loop_cust.details);
13 END LOOP loop_cust;
14 END;
15 /

```

Customer name	Street	City
Dhruv Garg	Marine Drive	Mumbai
Aakash Tiwary	HiTech City	Hyderabad
Raagul Nagendran	Singanallur	Coimbatore
Vishnu Nagpal	Connaught Place	Delhi
Arush Sharma	Race course	Dehradun
Abhinav Sharma	Sushant Lok	Gurgaon
Rachit Tiwari	Malleshwaram	Bengaluru

PL/SQL procedure successfully completed.