Ex. No:9
Date:3/10/2019

Ex. No. 9 PROCEDURES AND FUNCTIONS

Aim:

To write procedures and functions in sql.

Description:

A procedures or function is a group or set of SQL and PL/SQL statements that perform a specific task."
A function and procedure is a named PL/SQL Block which is similar . The major difference between a procedure and a function is, a function must always return a value, but a procedure may or may not return a value.

Questions:
Create the following tables
Course(coursecode,coursename,syllabus,lastno)
Insert the values into course table
<10,'oracle','sql', 2>
<20,'java','java servlets', 2>
Feespaid(rollno,feespaiddate,chequeno,bankname,remarks,amount)
<10001,'25-jul-98',12345,'',20000>
<10002,'27-jul-15',12789,'',25000>
<10003,'2-oct-16',13456,'',35000>
Enquiry(enquiryno,name,coursecode,street,city,enquirydate,refcode)
<1100011,anil,10,ramnagar,Nagpur,01-jul-98,1001>
<1100012,achin,20,gandhinagar,Nagpur,01-sep-99,1002>
Enrollment(rollno,enquiryno,batchcode,enrollmentdate)
<20002001,10001,200200,'1-jul-98'>
<20002003,10002,200202,'03-aug-17'>
<20002001,10003,200203,'02-sep-99'>

1. Write a PL/SQL statement to fetch the salary of employee ANIL and calculate the grade according to its value. [condn : if the salary is less than 1000 print the grade as A/ if the salary is less than 2000 print the grade as B/ if the salary is less than 3000 print the grade as C/ if the salary is less than 4000 print the grade as D]

```
SQL>  declare
  2   a number;
  3   begin
  4   select salary into a
  5   from emp_company_cs076
  6   where ename='anil';
  7   if(a<1000) then
  8   dbms_output.put_line('Grade A');
  9   elsif(a<2000) then
 10   dbms_output.put_line('Grade B');
 11   elsif(a<3000) then
 12   dbms_output.put_line('Grade C');
 13   else
 14   dbms_output.put_line('Grade D');
 15   end if;
 16   end;
 17   /
Grade B

PL/SQL procedure successfully completed.
```

2. Write a procedure to calculate the coursename corresponding to the course code.

```
SQL>  declare
  2   a number;
  3   b varchar2(20);
  4   begin
  5   select coursename into b
  6   from course
  7   where coursecode='&a';
  8   dbms_output.put_line(b);
  9   end;
 10   /
Enter value for a: 10
old   7:  where coursecode='&a';
new   7:  where coursecode='10';
oracle

PL/SQL procedure successfully completed.
```

3. Display coursename by considering the exception. If the given coursecode is not found, then raise an exception that course name is not available.

```
SQL> declare a number;
  2  b varchar2(20);
  3  begin
  4  select coursename into b
  5  from course
  6  where coursecode='&a';
  7  exception
  8  when
  9  no_data_found then
 10  dbms_output.put_line('no data found');
 11  when
 12  others then
 13  dbms_output.put_line('error');
 14  end;
 15  /
Enter value for a: 10
old   6: where coursecode='&a';
new   6: where coursecode='10';

PL/SQL procedure successfully completed.
```

4. Write a function to calculate total amount collected.

```
SQL> declare
  2  a number;
  3  begin
  4  select sum(amount) into a
  5  from feespaid;
  6  dbms_output.put_line(a);
  7  end;
  8  /
80000

PL/SQL procedure successfully completed.
```

5. Display the number of enquiries for a specified advertisement code.

```
SQL> declare
  2  a number;
  3  b number;
  4  begin
  5  select count(enquiryno) into a
  6  from enquiry
  7  where refcode='&b';
  8  dbms_output.put_line(a);
  9  end;
 10  /
Enter value for b: 1001
old   7: where refcode='&b';
new   7: where refcode='1001';
1

PL/SQL procedure successfully completed.
```

6. Write a function to calculate the total fees paid by a particular student.

```
SQL>  create or replace function fun1
  2   return number
  3   as
  4   x number:=0;
  5   begin
  6   select sum(amount) into x
  7   from feespaid
  8   where rollno='&b';
  9   return x;
 10   end;
 11   /
Enter value for b: 10001
old   8:  where rollno='&b';
new   8:  where rollno='10001';

Function created.

SQL>  declare
  2   a number;
  3   begin
  4   a:=fun1();
  5   dbms_output.put_line(a);
  6   end;
  7   /
20000

PL/SQL procedure successfully completed.
```

Result:

The above queries have been executed and the results have been verified.