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Programme	:	**B.Tech CSE, AL & ML, CPS**	Semester	:	**Winter-21**
Course	:	**Database Management Systems (Embedded Lab)**	Code	:	**CSE2004**
Faculty	:	**Dr. M. Braveen** **Dr. M. Rajesh**	Slot	:	**L33+L34**

Ex. No. 10

Date: 07-06-2021

PL/SQL – Procedures and Functions

1. Write a PL/SQL procedure to find the reverse of a number.

```
SQL> set serveroutput on
SQL> declare
  2  x number;
  3  y number;
  4  procedure reverse(num in number, rev out number)
  5  is
  6  temp number;
  7  begin
  8  rev:=0;
  9  temp:=num;
 10  while temp>0
 11  loop
 12  rev:=(rev*10)+mod(temp,10);
 13  temp:=floor(temp/10);
 14  end loop;
 15  end;
 16
 17  begin
 18  x:=&x;
 19  reverse(x,y);
 20  dbms_output.put_line('Reverse '||y);
 21  end;
 22  /
Enter value for x: 985
old  18: x:=&x;
new  18: x:=985;
Reverse 589

PL/SQL procedure successfully completed.
```

2. Write a PL/SQL function to find the total number of numbers divisible by 7 from 1 till 100

```
SQL> declare
  2  x number;
  3  function divisible
  4  return number
  5  is
  6  z number;
  7  begin
  8  z:=0;
  9  for k in 1..100
 10  loop
 11  if(mod(k,7)=0) then
 12  z:=z+1;
 13  end if;
 14  end loop;
 15  return z;
 16  end;
 17  begin
 18  x:=divisible();
 19  dbms_output.put_line('count:'||x);
 20  end;
 21  /
count:14

PL/SQL procedure successfully completed.
```

PL/SQL – Procedures and Functions with tables

For the already created table of student schema,
Student(regno, name, cgpa)
Course(ccode, cname, credits)
Student_course(regno, ccode)

1. Write a PL/SQL procedure to find the cgpa of the student with regno 101

```
SQL> declare
  2  procedure find(reg_no in number) is
  3  answer student.cgpa%type;
  4  begin
  5  answer:=null;
  6  select cgpa into answer from student where regno=reg_no;
  7  dbms_output.put_line('cgpa '||answer);
  8  end;
  9  begin
 10  find(101);
 11  end;
 12  /
cgpa 9.6

PL/SQL procedure successfully completed.
```

2. Write a PL/SQL procedure to find the name of the student with minimum cgpa

```
SQL> declare
  2  procedure min_cgpa
  3  is
  4  answer student.name%type;
  5  begin
  6  select name into answer from student where cgpa=(select min(cgpa) from student);
  7  dbms_output.put_line('minimum cgpa student:'||answer);
  8  end;
  9  begin
 10  min_cgpa;
 11  end;
 12  /
minimum cgpa student:Ramya

PL/SQL procedure successfully completed.
```

3. Write a PL/SQL procedure/function to count the number of students who have registered more than 2 courses.

```
SQL> declare
  2  procedure data
  3  is
  4  count_stu number;
  5  begin
  6  count_stu:=0;
  7  select count(8) into count_stu from (select regno from course_student group by regno having count(ccode)>2);
  8  dbms_output.put_line('number of student:'||count_stu);
  9  end;
 10  begin
 11  data;
 12  end;
 13  /
number of student:0

PL/SQL procedure successfully completed.
```