**Institute of Engineering & Management**

**Department of Computer Science & Engineering**

**Data-Base Management System Lab for 3rd year 6th semester 2019**

**Code: CS 691**

**Date:** 28/03/19

**WEEK-5**

**Problem Statement-1:** display your name 5 times using for loop.

**SQL :**

SQL> set serveroutput on;

SQL> DECLARE

2 name varchar2(20) := 'Ranajit Roy';

3 BEGIN

4 for i in 1..5 LOOP

5 dbms\_output.put\_line(name);

6 END LOOP;

7 END;

8 /

Ranajit Roy

Ranajit Roy

Ranajit Roy

Ranajit Roy

Ranajit Roy

**Problem Statement-2:** write a pl/sql block of code to invert a number 12345 to 54321.

**SQL :**

SQL> DECLARE

2 num integer := &num;

3 result integer := 0;

4 BEGIN

5 WHILE num!=0 LOOP

6 result := result\*10 + MOD(num,10);

7 num := FLOOR(num/10);

8 END LOOP;

9 dbms\_output.put\_line(result);

10 END;

11 /

Enter value for num: 12345

old 2: num integer := &num;

new 2: num integer := 12345;

54321

**Problem Statement-3:** write a pl/sql code block to calculate the area of circle for a value of radius varying from 3 to 7. store the radius & the corresponding values of calculated area in an empty table named areas, consisting of two columns, radius & area.

**SQL :**

SQL> create table area(radius integer, area number(5,4));

Table created.

SQL> DECLARE

2 pi constant number(5,2) := 3.14;

3 area number(5,2);

4 BEGIN

5 FOR radius in 3..7 LOOP

6 area := pi\*radius\*radius;

7 insert into area values(radius, area);

8 END LOOP;

9 END;

10 /

PL/SQL procedure successfully completed.

SQL> select \* from area;

RADIUS AREA

---------- ----------

3 28.26

4 50.24

5 78.5

6 113.04

7 153.86

**Problem Statement-4:** create a simple loop such that a message is displayed when a loop exceeds a particular value(while loop).

**SQL :**

SQL> DECLARE

2 inp integer := &inp;

3 a integer := 0;

4 BEGIN

5 WHILE a<=inp LOOP

6 dbms\_output.put\_line(a);

7 a := a+1;

8 END LOOP;

9 dbms\_output.put\_line('Value Exceeded!');

10 END;

11 /

Enter value for inp: 4

old 2: inp integer := &inp;

new 2: inp integer := 4;

0

1

2

3

4

Value Exceeded!

**Problem Statement-5:** write a pl/sql block code that will accept an account number from the user, check if the user's balance is less than the minimum balance, only then deduct rs. 100/- from the available balance. the process is fired on the accounts table.

**SQL :**

SQL> select \* from accounts;

ACCNO CURRBAL

---------- ----------

1 4900

2 19900

3 34900

4 49900

5 64900

6 79900

6 rows selected.

SQL> DECLARE

2 acid accounts.accno%type := &acid;

3 bal accounts.currbal%type;

4 BEGIN

5 SELECT currbal INTO bal FROM accounts WHERE accno=acid;

6 IF bal<=50000 THEN

7 UPDATE accounts SET currbal = currbal-100 WHERE accno=acid;

8 dbms\_output.put\_line('Balance updated!');

9 ELSE

10 dbms\_output.put\_line('Balance above min balance.');

11 END IF;

12 END;

13 /

Enter value for acid: 4

old 2: acid accounts.accno%type := &acid;

new 2: acid accounts.accno%type := 4;

Balance updated!

PL/SQL procedure successfully completed.

SQL> select \* from accounts;

ACCNO CURRBAL

---------- ----------

1 4900

2 19900

3 34900

4 49800

5 64900

6 79900

6 rows selected.

**Problem Statement-6:** bank declares 8% interest on capital. so, update all accounts using pl/sql code block.

**SQL :**

SQL> DECLARE

2 BEGIN

3 UPDATE accounts SET currbal=currbal\*1.08;

4 END;

5 /

PL/SQL procedure successfully completed.

SQL> select \* from accounts;

ACCNO CURRBAL

---------- ----------

1 5292

2 21492

3 37692

4 53784

5 70092

6 86292

6 rows selected.