Assignment No. 5(A)

Title   : Write a PL/SQL code block to calculate the area of a circle for a value of radius varying from 5 to 9. Store the radius and the corresponding values of calculated area in an empty table named areas, consisting of two columns, radius and area.

```
mysql> CREATE DATABASE Circle;
Query OK, 1 row affected (0.01 sec)

mysql> USE Circle;
Database changed
mysql> CREATE TABLE tbl_area(radius INT,area FLOAT);
Query OK, 0 rows affected (0.01 sec)

mysql> DESC tbl_area;
+--------+-------+------+-----+---------+---------+
| Field  | Type  | Null | Key | Default | Extra   |
+--------+-------+------+-----+---------+---------+
| radius | int   | YES  |     | NULL    |         |
| area   | float | YES  |     | NULL    |         |
+--------+-------+------+-----+---------+---------+
2 rows in set (0.00 sec)

mysql> SELECT * FROM tbl_area;
Empty set (0.00 sec)
********************************************************************************
```

```
****************************Defining Procedure*********************************
mysql> drop procedure if exists Find_Circle_Area;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
mysql> delimiter //
mysql>
mysql> create procedure Find_Circle_Area()
  -> BEGIN
  -> declare r int;
  -> declare a float;
  ->
  -> set r = 5;
  -> loop_label: LOOP
  ->     IF  r > 9 THEN
  ->        LEAVE  loop_label;
  ->     END  IF;
```

```
   ->
   ->     set a = 3.14 * r * r;
   ->        insert into tbl_area(radius,area) values(r,a);
   ->
   ->        set r = r + 1;
   ->
   ->   END LOOP;
   ->
   -> END;
   ->
   -> //
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> delimiter ;
*****************************************************************************


******************************Calling Procedure**********************************
mysql> call Find_Circle_Area();
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM tbl_area;
+--------+----------+
| radius | area     |
+--------+----------+
|   5    |  78.5    |
|   6    | 113.04   |
|   7    | 153.86   |
|   8    | 200.96   |
|   9    | 254.34   |
+--------+----------+
5 rows in set (0.00 sec)

mysql>
*****************************************************************************
```