ASSIGNMENT NO – 04

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.

STEP – 1 : Create Table **areas** to store area of circle
```
CREATE TABLE areas (
  2    radius NUMBER,
  3    area NUMBER
  4 );
Table created.
```

STEP - 2: PL/SQL Code Block

```
SQL>
  1  DECLARE
  2    v_radius NUMBER;
  3    v_area NUMBER;
  4    BEGIN
  5
  6    FOR v_radius IN 5..9 LOOP
  7       -- Calculate the area of the circle
  8       v_area := 3.14159 * v_radius * v_radius;
  9
 10       -- Insert the radius and area into the areas table
 11       INSERT INTO areas (radius, area)
 12       VALUES (v_radius, v_area);
 13    END LOOP;
 14
 15    -- Commit the transaction
 16    COMMIT;
 17 END;
 18 /

PL/SQL procedure successfully completed.
```

OUTPUT:

```
SQL> SELECT  *FROM areas;

   RADIUS      AREA
   ----------  ----------
        5      78.53975
        6      113.09724
        7      153.93791
        8      201.06176
        9      254.46879
```