ASSIGNMENT 9

1. Wap to find area of circle in PLSQL.

```
DECLARE
      r DECIMAL(5,2);
      a DECIMAL(10,2);
BEGIN
      r := &r;
      a := 3.14*r*r;
      DBMS_OUTPUT.PUT_LINE('Area of circle: ' || a);
END;
/
```

OUTPUT

```
SQL> SET SERVEROUTPUT ON;
SQL> EDIT C:\dbmsLab\lab9\q1.sql

SQL> @C:\dbmsLab\lab9\q1.sql
Enter value for r: 4
old   5:         r := &r;
new   5:         r := 4;
Area of circle: 50.24

PL/SQL procedure successfully completed.
```

2. Wap to check no is odd or even PLSQL.

```
DECLARE
      n NUMBER(5);
BEGIN
      n := &n;
      IF (MOD(n,2)=0) THEN
            DBMS_OUTPUT.PUT_LINE('EVEN');
      ELSE
            DBMS_OUTPUT.PUT_LINE('ODD');
      END IF;
END;
/
```

OUTPUT

```
SQL> EDIT C:\dbmsLab\lab9\q2.sql

SQL> @C:\dbmsLab\lab9\q2.sql
Enter value for n: 54327
old   4:        n := &n;
new   4:        n := 54327;
ODD

PL/SQL procedure successfully completed.
```

3. Wap to check greatest no among three No. In PLSQL.

```
DECLARE
      a NUMBER(5);
      b NUMBER(5);
      c NUMBER(5);
BEGIN
      a := &a;
      b := &b;
      c := &c;
      IF (a > b) AND (a > c) THEN
            DBMS_OUTPUT.PUT_LINE(a||' is greatest');
      ELSIF (b > a) AND (b > c) THEN
            DBMS_OUTPUT.PUT_LINE(b||' is greatest');

      ELSIF (c > a) AND (c > b) THEN
            DBMS_OUTPUT.PUT_LINE(c||' is greatest');
      END IF;
END;
/
```

OUTPUT

```
SQL> @C:\dbmsLab\lab9\q3.sql
Enter value for a: 20
old   6:        a := &a;
new   6:        a := 20;
Enter value for b: 30
old   7:        b := &b;
new   7:        b := 30;
Enter value for c: 10
old   8:        c := &c;
new   8:        c := 10;
30 is greatest

PL/SQL procedure successfully completed.
```

4. Wap to enter character and check it is vowel or consonant in PLSQL.

```
DECLARE
      ch CHAR;
BEGIN
      ch := '&ch';
      IF ch IN ('A', 'E', 'I', 'O', 'U', 'a', 'e', 'i', 'o', 'u') THEN
            DBMS_OUTPUT.PUT_LINE(ch || ' is a vowel');
      ELSE
            DBMS_OUTPUT.PUT_LINE(ch || ' is a consonant');
      END IF;
END;
/
```

OUTPUT

```
SQL> EDIT C:\dbmsLab\lab9\q4.sql

SQL> @C:\dbmsLab\lab9\q4.sql
Enter value for ch: O
old   4:        ch := '&ch';
new   4:        ch := 'O';
O is a vowel

PL/SQL procedure successfully completed.

SQL> @C:\dbmsLab\lab9\q4.sql
Enter value for ch: h
old   4:        ch := '&ch';
new   4:        ch := 'h';
h is a consonant

PL/SQL procedure successfully completed.
```

5. Wap to find the multiplication table in PL/SQL.

```
DECLARE
      n NUMBER(10);
      i NUMBER(5);
BEGIN
      n := &n;
      i := 1;
      WHILE (i < 11)
      LOOP
            DBMS_OUTPUT.PUT_LINE(n||' x '||i|| ' = '||(n*i));
            i := i + 1;
      END LOOP;
END;
/
```

OUTPUT

```
SQL> EDIT C:\dbmsLab\lab9\q5.sql

SQL> @C:\dbmsLab\lab9\q5.sql
Enter value for n: 13
old   5:        n := &n;
new   5:        n := 13;
13 x 1 = 13
13 x 2 = 26
13 x 3 = 39
13 x 4 = 52
13 x 5 = 65
13 x 6 = 78
13 x 7 = 91
13 x 8 = 104
13 x 9 = 117
13 x 10 = 130

PL/SQL procedure successfully completed.
```

6. Wap to check no is Armstrong no or not in PLSQL.

```
DECLARE
      N NUMBER;
      s NUMBER:= 0;
      len NUMBER;
      r NUMBER;
      temp NUMBER;
BEGIN
      N:= &N;
      temp:= N;
      len := length(to_char(n));
      WHILE N > 0
      LOOP
            r := MOD(N,10);
            s := s + power(r, len);
            N := trunc(N/10);
      END LOOP;
      IF (s=temp) THEN
            DBMS_OUTPUT.PUT_LINE('ARMSTRONG NO.');
      ELSE
            DBMS_OUTPUT.PUT_LINE('NOT AN ARMSTRONG NO.');
      END IF;
END;
/
```

OUTPUT

```
SQL> @C:\dbmsLab\lab9\q6.sql
Enter value for n: 153
old   8:        N:= &N;
new   8:        N:= 153;
ARMSTRONG NO.

PL/SQL procedure successfully completed.

SQL> @C:\dbmsLab\lab9\q6.sql
Enter value for n: 325
old   8:        N:= &N;
new   8:        N:= 325;
NOT AN ARMSTRONG NO.

PL/SQL procedure successfully completed.
```