

Submit TODAY (21-10-2021) by 2:00PM

PRINT YOUR ROLL NO in every PLSQL program

```
SQL> variable g_double NUMBER;
SQL> DECLARE
  2     v_num NUMBER (2);
  3     v_double NUMBER (3);
  4 BEGIN
  5     v_num := &p_num;
  6     v_double := v_num * 2;
  7     :g_double := v_double;
  8     DBMS_OUTPUT.PUT_LINE
  9     ('Substitution variable NUMBER IS ' || TO_CHAR(v_num));
 10     DBMS_OUTPUT.PUT_LINE
 11     ('Local NUMBER IS ' || TO_CHAR (v_double));
 12     DBMS_OUTPUT.PUT_LINE
 13     ('Host NUMBER IS ' || TO_CHAR (:g_double));
 14 END;
 15 /
Enter value for p_num: 5
old 5:     v_num := &p_num;
new 5:     v_num := 5;
Substitution variable NUMBER IS 5
Local NUMBER IS 10
Host NUMBER IS 10

PL/SQL procedure successfully completed.
```

Basic Loop

```
SQL> DECLARE counter INTEGER := 1;
  2 BEGIN
  3     LOOP
  4         DBMS_OUTPUT.PUT_LINE('The Numbers are: ' || counter);
  5         EXIT WHEN counter = 5;
  6         counter := counter + 1;
  7     END LOOP;
  8 END;
  9 /
The Numbers are: 1
The Numbers are: 2
The Numbers are: 3
The Numbers are: 4
The Numbers are: 5

PL/SQL procedure successfully completed.
```

```

SQL> DECLARE counter INTEGER := 5;
2   BEGIN
3       LOOP
4           DBMS_OUTPUT.PUT_LINE('The Numbers are: ' || counter);
5           EXIT WHEN counter = 1;
6           counter := counter - 1;
7       END LOOP;
8   END;
9   /
The Numbers are: 5
The Numbers are: 4
The Numbers are: 3
The Numbers are: 2
The Numbers are: 1

PL/SQL procedure successfully completed.

```

%ROWTYPE

PRINTING A RECORD FROM MARKS TABLE USING %ROWTYPE

```

SQL> SELECT * FROM MARKS;

ROLLNO      MARKS
-----
R1001        50
R1002        72
R1003        82

SQL> DECLARE
2   marks_rec marks%rowtype;
3   BEGIN
4       SELECT * into marks_rec
5       FROM marks
6       WHERE ROLLNO = 'R1001';
7       dbms_output.put_line('ROLL NO IS : ' || marks_rec.rollno);
8       dbms_output.put_line('MARKS IS : ' || marks_rec.MARKS);
9   END;
10  /
ROLL NO IS : R1001
MARKS IS : 50

PL/SQL procedure successfully completed.

```

Finding the average of sum of 1 to 20

```
SQL> DECLARE
  2   v_count NUMBER;
  3   v_sum   NUMBER := 0;
  4   v_average NUMBER (3, 1);
  5 BEGIN
  6     v_count := 1;
  7     LOOP
  8         v_sum := v_sum + v_count;
  9         v_count := v_count + 1;
10         EXIT WHEN v_count > 20;
11     END LOOP;
12     v_average := v_sum / 20;
13     DBMS_OUTPUT.PUT_LINE ('AVERAGE OF 1 TO 20 IS:      ' || v_average);
14 END;
15 /
AVERAGE OF 1 TO 20 IS:      10.5

PL/SQL procedure successfully completed.
```

WHILE LOOP

```
CREATE TABLE temporary
( counter_values NUMBER);
```

```
SQL> DECLARE counter NUMBER := 1;
  2   BEGIN
  3       WHILE counter <= 5
  4       LOOP
  5           INSERT INTO temporary VALUES (counter);
  6           counter := counter + 1;
  7       END LOOP;
  8   END;
  9   /
```

PL/SQL procedure successfully completed.

```
SQL> SELECT * FROM temporary;
```

```
COUNTER_VALUES
-----
          1
          2
          3
          4
          5
```