PL/SQL - DBMS OUTPUT

The **DBMS_OUTPUT** is a built-in package that enables you to display output, display debugging information, and send messages from PL/SQL blocks, subprograms, packages, and triggers. We have already used this package all throughout our tutorial.

Let us look at a small code snippet that would display all the user tables in the database. Try it in your database to list down all the table names:

```
BEGIN
   dbms_output.put_line  (user || ' Tables in the database:');
   FOR t IN (SELECT table_name FROM user_tables)
   LOOP
      dbms_output.put_line(t.table_name);
   END LOOP;
END;
/
```

DBMS_OUTPUT Subprograms

The DBMS_OUTPUT package has the following subprograms:

S.N	Subprogram & Purpose
1	**DBMS_OUTPUT.DISABLE;** Disables message output
2	**DBMS_OUTPUT.ENABLE(buffer_size IN INTEGER DEFAULT 20000);** Enables message output. A NULL value of buffer_size represents unlimited buffer size.
3	**DBMS_OUTPUT.GET_LINE (line OUT VARCHAR2, status OUT INTEGER);** Retrieves a single line of buffered information.
4	**DBMS_OUTPUT.GET_LINES (lines OUT CHARARR, numlines IN OUT INTEGER);** Retrieves an array of lines from the buffer.
5	**DBMS_OUTPUT.NEW_LINE;** Puts an end-of-line marker
6	**DBMS_OUTPUT.PUT(item IN VARCHAR2);** Places a partial line in the buffer.
7	**DBMS_OUTPUT.PUT_LINE(item IN VARCHAR2);** Places a line in the buffer.

Example:

```
DECLARE
   lines dbms_output.chararr;
   num_lines number;
BEGIN
   -- enable the buffer with default size 20000
   dbms_output.enable;

   dbms_output.put_line('Hello Reader!');
   dbms_output.put_line('Hope you have enjoyed the tutorials!');
   dbms_output.put_line('Have a great time exploring pl/sql!');

   num_lines := 3;
```

```
   dbms_output.get_lines(lines, num_lines);

   FOR i IN 1..num_lines LOOP
      dbms_output.put_line(lines(i));
   END LOOP;
END;
/
```

When the above code is executed at SQL prompt, it produces the following result:

```
Hello Reader!
Hope you have enjoyed the tutorials!
Have a great time exploring pl/sql!

PL/SQL procedure successfully completed.
```