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## DBMS\_SQL

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### Description

1. Since DB2 does not support invocation context persistence between functions and procedures, the following routines are implemented as procedures instead of functions: OPEN\_CURSOR, IS\_OPEN, EXECUTE\_FETCH\_ROWS, EXECUTE\_AND\_FETCH, and LAST\_ROW\_COUNT

2. Stored Procedure with DBMS\_SQL.VARCHAR2\_TABLE,DBMS\_SQL.NUMBER\_TABLE as output parameter.

Example:

```
FUNCTION split(list IN VARCHAR2, delimiter IN VARCHAR2) RETURN dbms_sql.varchar2_table AS...
```

3. Since DB2 does not allow overloading by parameter type, DBMS\_SQL.COLUMN\_VALUE DBMS\_SQL.BIND\_VARIABLE DBMS\_SQL.DEFINE\_COLUMN are not supported.

4. DBMS\_SQL.Parse ( nid, cmd, dbms\_sql.native) statement does not automatically execute DDL statements like "truncate table". In Oracle, the DBMS\_SQL.Parse statement below is enough to parse and execute a DDL statement in the same time (there is no need to have the DBMS\_SQL.Execute (nid)). In DB2 we need to explicitly specify the DBMS\_SQL.Execute (nid) statement in order the DDL request to be executed.

In the following example, we do not get an error, but after executing the statement, the table did not get truncated.

```
nid := DBMS_SQL.OPEN_CURSOR;
cmd := 'TRUNCATE TABLE tab_name';
DBMS_SQL.Parse ( nid, cmd, dbms_sql.native);
DBMS_SQL.CLOSE_CURSOR(nid);
```

### Solution

1. Rewrite such function calls to be procedure calls instead.

2. Create your own type equivalent.

```
TYPE VARCHAR2_TABLE IS TABLE OF VARCHAR2(2000) INDEX BY BINARY_INTEGER;
TYPE NUMBER_TABLE IS TABLE OF NUMBER INDEX BY BINARY_INTEGER;
```

3. Using DB2 equivalen for each datatype, for example DBMS\_SQL.BIND\_VARIABLE\_VARCHAR.

Can be converted automatically: NO