

What is FORALL?

FORALL is used to perform bulk DML operations (INSERT, UPDATE, DELETE) efficiently.

Instead of executing DML statements one by one in a loop, FORALL processes multiple records in a single context switch between PL/SQL and SQL. This makes it much faster than row-by-row processing.

Syntax of FORALL

```
FORALL index IN collection.FIRST .. collection.LAST
```

```
SQL_DML_Statement;
```

index: The loop index (acts as a placeholder).

collection: A PL/SQL collection (Nested Table, VARRAY, or Associative Array).

SQL_DML_Statement: INSERT, UPDATE, or DELETE operation using the collection.

Why Use FORALL?

Faster than row-by-row operations (Reduces context switching).

Minimizes SQL execution time (Executes all records in a single context switch).

Handles large data efficiently (Best when working with thousands/millions of records).