

# SQL statements in PL/SQL

The following SQL operations can be accommodated in PL SQL :

- Extract a row of data from the database by using the SELECT command.
- Make changes to rows in the database by using DML commands.
  - INSERT
  - UPDATE
  - DELETE
- Control a transaction with the COMMIT, ROLLBACK, or SAVEPOINT command.

# Retrieving Data in PL/SQL

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- Data can be retrieved from the database using SELECT command.
- SELECT statement must be used with the INTO clause
- The SELECT query must return exactly one row.
- If no rows are returned or if more than one record is returned then exception would be raised.
- More than one column or a \* can be included in the SELECT list
- The number and data type of variables after INTO clause should match with the select\_list columns.

# Retrieving Data in PL/SQL

## Syntax:

```
SELECT select_list
INTO    {variable_name[, variable_name]...
        | record_name}
FROM    table
WHERE   condition;
```

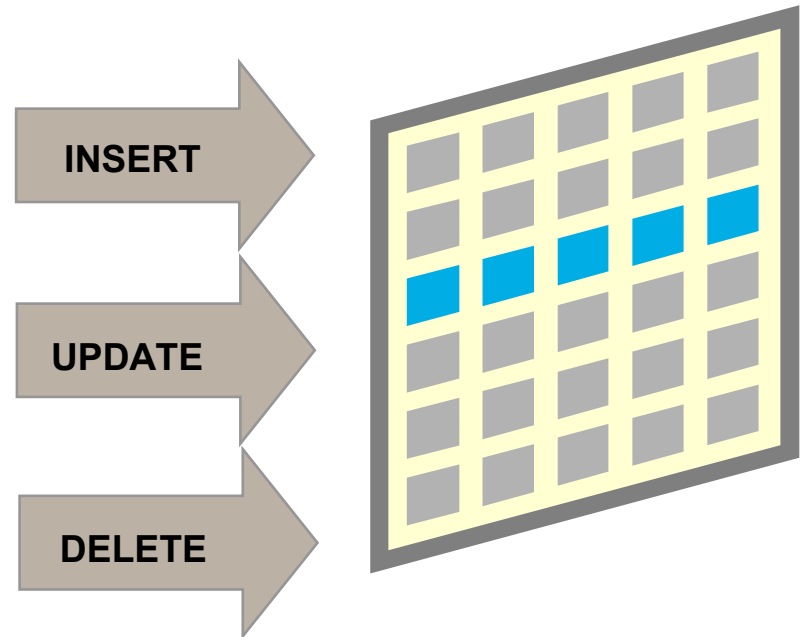
## Example:

```
DECLARE
    v_empid    employee.emp_id%TYPE;
    v_empname   employee.emp_name%TYPE;
BEGIN
    SELECT    emp_id, emp_name
    INTO      v_empid, v_empname
    FROM      employee
    WHERE     id = 620;
    dbms_output.put_line('Employee Name' || v_empname);
END;
```

# Manipulating Data Using PL/SQL

Make changes to database tables by using DML commands:

- INSERT
- UPDATE
- DELETE



# Updating and Deleting Data Example

- Increase the salary of all employees in the EMP table who are Analysts

Example:

```
DECLARE
    v_sal_increase    emp.sal%TYPE := 2000;
BEGIN
    UPDATE emp
    SET
        sal = sal + v_sal_increase
    WHERE job = 'ANALYST';
END;
```

- Delete rows that belong to department 10 from the emp table.

```
DECLARE
    v_deptno    emp.deptno%TYPE := 10;
BEGIN
    DELETE FROM    emp
    WHERE
        deptno = v_deptno;
END;
```

**Thank You**