

28-06-2024

Creating Functions

1.CREATE OR REPLACE FUNCTION get_sal

(p_id IN employees.employee_id%TYPE)

RETURN NUMBER

IS

v_salary employees.salary%TYPE :=0;

BEGIN

SELECT salary

INTO v_salary

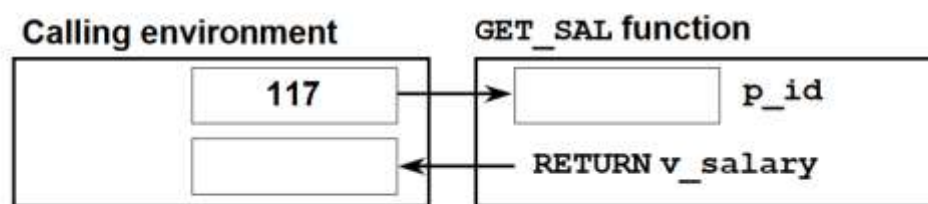
FROM employees

WHERE employee_id = p_id;

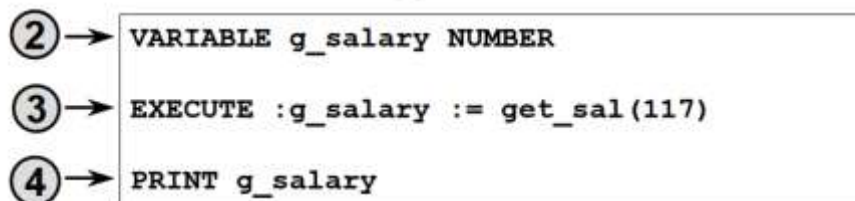
RETURN v_salary;

END get_sal;

Executing Functions: Example



1. Load and run the get_salary.sql file to create the function



2.CREATE OR REPLACE FUNCTION tax(p_value IN NUMBER)

RETURN NUMBER IS

BEGIN

```

RETURN (p_value * 0.08);

END tax;

/

SELECT employee_id, last_name, salary, tax(salary)
FROM employees
WHERE department_id = 100;

3.DROP FUNCTION get_sal;

```

Comparing Procedures and Functions

Procedure	Function
Execute as a PL/SQL statement	Invoke as part of an expression
No RETURN clause in the header	Must contain a RETURN clause in the header
Can return none, one, or many values	Must return a single value
Can contain a RETURN statement	Must contain at least one RETURN statement

Managing Subprograms

List All Procedures and Functions

```

4.SELECT object_name, object_type
FROM user_objects
WHERE object_type in ('PROCEDURE',
'FUNCTION')ORDER BY object_name;

```

```

5.SELECT text
FROM user_source
WHERE name = 'QUERY_EMPLOYEE'
ORDER BY line;

```

List Compilation Errors by Using SHOW ERRORS

6.SHOW ERRORS PROCEDURE log_execution